GOOD OLD BOAT™

THE SAILING MAGAZINE FOR THE *REST* OF US!

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Issue 65 March/April 2009

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MARCH/APRIL 2009

For the love of sailboats

Speaking seriously

Thrills, Chills, & Suspense at Sea!

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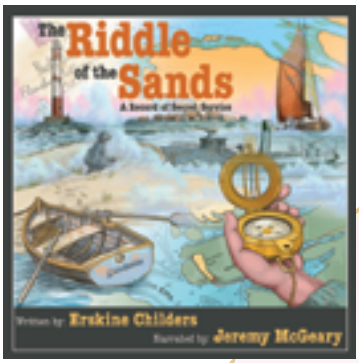

The Riddle of the Sands
by Erskine Childers

Davies has summoned his friend Carruthers from London to help him unravel a mystery. While cruising together aboard the *Dulcibella* in the waters of German Friesland, the two men think they have stumbled across activities that pose a threat to Britain. Carruthers knows the "who," he thinks, but not the "how" or the "when." The pair then weave two delicate courses, one in the *Dulcibella* among the treacherous sandbars and the other between the social and business worlds of the locals ashore and afloat. Another great sea story brought to life by the talented voice of Jeremy McGeary.

Telegram from the Palace
by Geoffrey Toye

Jack the Ripper in the 1880s. The sinking of the *Lusitania* during World War I. The British Royal family. Modern-day lovers enmeshed in a series of life-threatening events over which they have no control and of which they have even less comprehension. You won't be sure until the very end who the good guys are and what motivates the heroes and villains. Sail along with narrator Jeremy McGeary on this adrenaline-filled thriller by Geoffrey Toye.

A Voyage Toward Vengeance
by Jule Miller

Missing persons, murder, sunken vessels, unlikely comrades, and a couple of real sociopaths will frighten and entertain the adult listener of this nautical fiction by Jule Miller. There are plenty of realistic sailing scenes and good nautical detail but not enough to prevent the non-sailor from appreciating the tale. All readers with vivid imaginations will find it difficult to sleep at night while listening to this one. An audiobook for adults only.

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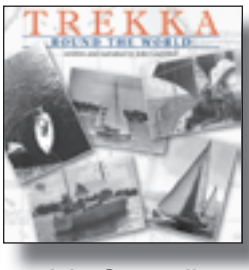
Just for fun

What's more

About the cover . . .

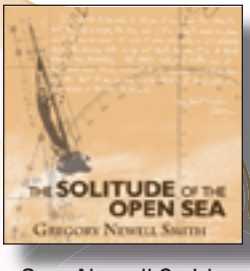
Massachusetts photographer Paul Rezendes captivates us frequently with scenes he captures while sailing his 1982 Bayfield 29, *Rachel Kalyn*, this issue's cover girl. This peaceful photo was taken at her home mooring in Pine Island Bay in Groton, Connecticut.

Circumnavigations and other true sailing tales!



John Guzzwell:
Trekka Round the World

Legendary sailor John Guzzwell narrates the adventures he had while circumnavigating in *Trekka*, the 20-foot yawl he built. This is a must-have release for all who now follow in his wake and those who dream of doing so.



Greg Newell Smith:
The Solitude of the Open Sea

In this series of narrative essays, Greg Newell Smith reflects upon the many adventures he had and discoveries he made during his world circumnavigation. *The Solitude of the Open Sea* takes you to the most unexpected places.

Dave and Jaja Martin:
Into the Light

Well-known circumnavigators, Dave and Jaja Martin possess the power to touch your heart and soul. The Martin family's true story of their travels in Iceland and Norway offers an honest look at life aboard in the best and in the worst of times.

Russell Doubleday:
A Year in a Yawl

A Year in a Yawl is a true tale of four young men traveling the Great Circle Route of the eastern United States over 100 years ago. Their youthful enthusiasm and resourcefulness make this a powerful and well-told classic.

Good Old Boat:
Bookends
50 View from Here and Last Tack columns

These musings about sailing and boat ownership from the editorial pages of *Good Old Boat* will entertain you whenever you miss being near your sailboat, as well as any time you're aboard or driving to the marina.

Joshua Slocum:
Sailing Alone Around the World

In 1895 at the age of 51, Joshua Slocum began a three-year circumnavigation aboard *Spray*. The first man to ever successfully complete a solo circumnavigation, he recounted the adventures he had along the way in this classic tale.

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GOOD OLD BOAT

FOUNDER/EDITOR
Karen Larson
karen@goodoldboat.com
FOUNDER/TECHNICAL EDITOR
Jerry Powlas
jerry@goodoldboat.com
PUBLISHER/ADVERTISING SALES DIRECTOR
Michael Facius
michael@goodoldboat.com• 612-605-8319
BUSINESS ADVISORY BOARD
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CREATIVE DIRECTOR
Mary Endres
AD PRODUCTION
Elizabeth Whelan
CLASSIFIED ADS AND FINANCIAL MANAGER
Karla Sandness
karla@goodoldboat.com• 701-952-9433
DIRECTOR OF CIRCULATION/RETAIL
Mark Busta
mark@goodoldboat.com• 701-952-9433
WEBMASTER
Jerry Stearns
www.goodoldboat.com
AUDIOBOOK MANAGER
Theresa Meis
www.AudioSeaStories.com

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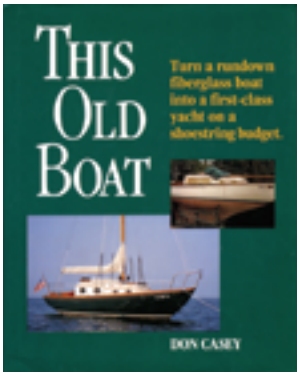
An ode to Don Casey

His magnum opus inspires anew

by Karen Larson



Jerry and I were in awe of Don Casey in 1997 when we started our new magazine named with a nod of appreciation to Don's popular book, *This Old Boat*. We didn't know Don personally yet, but once we'd chosen the name for our magazine, we quickly made email contact with him looking for permission to do a spinoff on the well-known title, first published in 1991. From then on, Don has been extremely supportive of the whole concept of our "sailing magazine for the rest of us."

Since we'd never published a sailing book nor sailed around the world, we asked Don to lend credibility to our effort by writing a guest editorial. That he did beautifully with his piece "Ode to Joy: In Praise of Good Old Boats" in our premier issue, June 1998. Read it sometime. It's passionate and compelling. If you don't already have a good old boat, you may run out and buy one.

In the fall of 2002, Jerry and I met Don and Olga Casey and wrote a profile about them and *Richard Cory*, their 30-foot Allied Seawind, in our January 2003 issue. During the interview, Don said he began writing *This Old Boat* because he figured *someone* should write a book that incorporates all the maintenance information sailors need. That book launched Don's career as the do-it-yourselfer's guru and one of sailing's most prominent authors. Since then, Don has written other books and thousands of articles but none can hold a candle to this classic. It has sold more than 50,000 copies since 1991. It is one of the most successful titles ever published by International Marine.

Don and his publishers agreed to revise the book in 2005. Don points out that this project was a mammoth one: "The new edition took a little more than twice as long to write as the original . . . my best estimate is that about 70 percent of the old content has been completely rewritten . . . notable changes are a lot of new material on diesel engines, including guidance on repowering, a much more comprehensive look at electrics, and an entirely new refrigeration chapter. Also new . . . mast refinishing, LPG plumbing, graphics application, lifeline replacement . . ." This second edition will be available in bookstores in April.

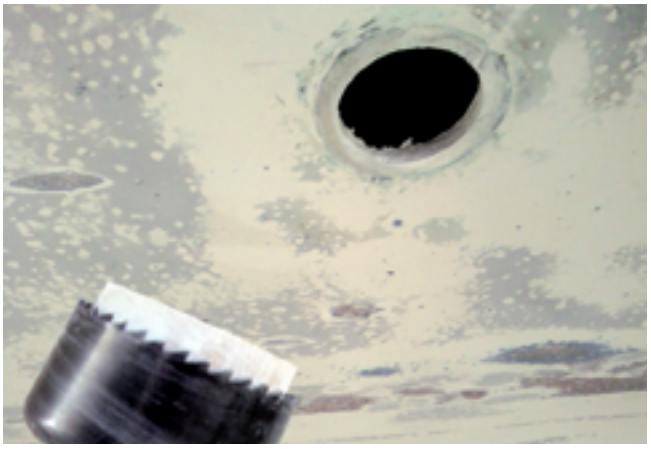
The sailing community is amazingly close-knit. Contributing editor Paul Ring writes fondly about his former boat, a Cheoy Lee Offshore 27, *Magnolia*. Watch for this piece in our May 2009 issue. As Paul will tell you with great pride, *Magnolia* just happens to be the boat that has graced, and will continue to grace, the cover of *This Old Boat*. Furthermore, *Good Old Boat* artist Fritz Seegers updated the illustrations in the second edition. They are outstanding and a terrific addition to an already fine book.

If we ever have any doubt about the popularity of Don's book, we need only go to our subscriber checks. Nearly every time we make a deposit of a fistful of checks for $39.95, one of those checks will be made out, not to *Good Old Boat*, but rather to *This Old Boat*. The bank takes them just the same, but we are humbled by the name recognition of the book that launched Don Casey's career and grateful to Don for having a hand in the launch of our own adventure.

On holes, workboats and Cutle

Hole-enlarging tip

As a follow-up to "Adding Holes in Your Boat?" in the November 2008 issue, I offer the following. Our old boat is a 1982 O'Day 30 that my wife and I bought in 2006. We've completed many projects on it and still have many to go. Last spring I was replacing some of the instruments,



including the depth finder and the knot meter. Both of the existing through-hull transducers were installed in 1¾-inch diameter holes. The new ones required 2-inch diameter holes. Rather than stand beneath the hull in its cradle manually opening up these holes in the hull with a rasp, I searched for a method that had a bit more finesse.

After a conversation one day at work, I came home and made a wood bushing that I screwed into a 2-inch hole saw. The larger piece is simply the slug from cutting a hole in ½-inch plywood; this serves as a spacer in the assembly. The smaller diameter bushing started with another slug cut with the 2-inch hole saw from a 1-inch thick scrap of maple. I drew a 1¾-inch diameter circle on this piece and then sanded it on a bench-top disc sander to make it 1¾-inch diameter. A couple of small screws later, it was all assembled as shown in the photos.

I chucked the hole saw and bushing assembly in a drill, inserted the bushing into the existing hole, lined it all up, and in seconds I had clean and true 2-inch diameter holes in the same locations as the original smaller ones.

Keep up the great work on *Good Old Boat*!

– Gary Gawor, Essex Junction, Vt.

One more tip

Great article about installing through-hulls and filling abandoned holes by Paul Ring in the November 2008 issue. However, I would modify the sequence of filling the core with epoxy putty. Once the hole is drilled from the outside through the outer skin and core, I would use the seacock flange as a template to drill holes in the outer skin before digging out the core and packing the void with epoxy putty. With the flange holes pre-drilled, you will have visual assurance that you have packed the epoxy all the way to the flange mounting screw points. You want to absolutely make sure you have no voids in these areas or you will crack the skin when tightening down the seacock flange.

– Jim Reddington, Noank, Conn.

Descended from what?

I do disagree strongly with Charlie Doane's premise, in the November 2008 issue, that the postwar CCA boats were descended from the handsome racing schooners of the 1920s. There simply are no similarities between the two types. The 1929 success of Olin Stephens' *Dorade* spelled the end of the schooners but *Dorade* in no way owed anything to those full-keel, short-ended, heavy vessels. It was Olin's brilliant design that was the true ancestor of the CCA type, not a working vessel or a yacht derived from them.

I'd be very interested in what Charlie has to say about my comments. I've re-read the article and now have to wonder why he placed so much emphasis on British and Baltic types yet ignored the Cape Cod catboat, the New Haven sharpie (and its derivatives such as the Presto sharpie), and American pilot schooners.

ss bearings . . .

The UK-built Fisher motorsailers are also a type worthy of mention, being based on Scottish fishing craft.

Finally, in fairness it needs to be pointed out that the Westsail 32 was designed by William Crealock. I really have to doubt her hull is identical to any Bill Atkin design.

– Ted Brewer, Agassiz, British Columbia

Charlie Doane responds

I was very happy to see you were interested enough in my article to raise questions about it. With respect to the ancestry of postwar CCA designs, you are certainly correct in pointing out that *Dorade* is a more direct ancestor than the older fisherman schooners but, to my eye, it seems the postwar CCA hulls and the old schooner hulls still have much in common. Not that there aren't, as you suggest, extremely important differences. As I point out in the paragraph just before the one you reference, the more modern boats were narrower than the schooners, had longer overhangs, were more deeply ballasted, and — of course — carried Marconi rigs. They also were more lightly constructed. Still, there are important organic similarities between the two types.

Both the schooners and CCA boats have cutaway full keels with overhanging ends, attached rudders, and essentially wineglass cross-sections that cannot be ignored. To most laypeople, at least, I think these similarities are key elements in what is now considered, in this day of much more exotic designs, a common "traditional" aesthetic. The advent of *Dorade*, as you note, was an important catalyst and indeed spelled the end of the schooners. But it is interesting to note that Olin Stephens himself concluded in the end he'd gone a bit too far with her. His subsequent designs were beamier and, unlike *Dorade*, had gently cutaway forefoots like the schooners they ultimately displaced.

You question also why I emphasized British and Baltic boats in my discussion. The reason for this is that I believe they had the biggest influence on the design of the purpose-built fiberglass production cruising boats that started appearing in the early '70s. Thanks to the success of the Westsail 32 (a reconfigured Baltic design) and to the notoriety of Lin and Larry Pardey (whose boats were essentially reconfigured British pilot cutters), there was a significant period of time when many people assumed a "serious" cruising boat must either be a double-ender or look something like a pilot cutter. Now, thank goodness, we know better, but it took some time for the industry to overcome these prejudices.

I would also point out that I did not ignore the Cape Cod catboat. I cited it as a prime example (along with the Friendship sloop) of an inshore fishing boat that later developed a very strong reputation as a cruising boat. I did neglect to mention sharpies and, yes, the Fisher motorsailers are obviously derived from workboats. There are many other boats and designers I might also have discussed (Tom Colvin, Bruce Roberts, and others like them, for example, deserve much more than a mere photo-caption mention) but, as I am sure you well know, magazine editors are never willing to give writers unlimited space in which to go on about such things.

Lastly, my understanding is the Westsail 32 was orginally designed as the Kendall 32 by Bill Crealock, and that Larry Kendall, the original builder, specifically commissioned Crealock to draw a boat very similar to Atkins' Eric. Most of Crealock's changes concerned the interior layout, the cabin-house, and of course the rig. I may have exaggerated a bit in describing the two hulls as "identical," but if you look at lines drawings of both Eric and the Westsail, you'll see they are nearly indistinguishable from one another. You'll note, too, that the later Westsail hulls, where Crealock was given much more of a free hand, are quite different — narrower, with canoe transoms and cutaway keels — and clearly anticipate his later designs for Pacific Seacraft.

Thanks so much for your interest in the article! I have always admired your designs and feel privileged to have a chance to have this sort of debate with you.

– Charlie Doane, Portsmouth, N.H.

Another nit to pick, Charlie

I enjoyed reading Charlie Doane's article (both times I read it) and enjoy the older type, classic designs. However, I have just one nit to pick: the caption on page 56 for the sail-plans of the Tahiti ketch and the Westsail 32 claim they are both derived from the Colin Archer "redningskoite" type. While that is true for the Westsail (Billy Atkin designed a trio of 32-foot Archer-inspired boats and a later one with some of the changes reversed), John Hanna's famous ketch

Thanks to Susan Landry for capturing this channel marker and lighthouse near Key Biscayne, Florida. Send a high-res image of your favorite aid to navigation. If it's printed, we'll send you a good old ball cap or T-shirt.

was descended from a different source. Both in print (in a couple of old magazine articles) and in a conversation with the late Charles Minor Blackford from Florida (a contemporary and good friend of John Hanna's) I was informed that he derived his Tahiti ketch from a fleet of double-ended boats used by sponge fishermen of Greek descent. So the Tahiti is an updated Greek sponge fisherman, just as the Westsail 32 is an updated Colin Archer. The Tahiti has a deeper and slightly firmer turn to the bilge underwater when seen in section and the buttock lines show a slightly shorter run. Both are very good boats for their intended use. A man I know in eastern Canada has a Tahiti ketch and loves her. I don't question his opinion in any way.

Best wishes for continued success with a most readable magazine.

– **David Keith,** Glenwood, Nova Scotia

Speaking of the Tahiti ketch . . .

I'm very glad you enjoyed the article and was most intrigued by your assertion that John Hanna's Tahiti ketch was in fact derived from Greek sponge-fishing boats rather than Colin Archer ketches. I crewed once on a Tahiti ketch, and its owner/skipper always insisted its design was derived from that of the Colin Archer but, after digging deeper, I find you are absolutely correct! Evidently Hanna purchased a ketch-rigged Greek sponge boat shortly after moving to Florida during World War I and this vessel was undeniably his primary inspiration when he later designed his Tahiti ketch. Hanna was very prejudiced in favor of double-ended hulls and must also have been familiar with Archer's design, so perhaps it did have some influence as well. Or perhaps Archer himself ran across some sponge boats before designing his pilot ketch. In either case, the boat's working-class pedigree is pure and undiluted.

Thanks for your interest and for setting me straight.

– **Charlie Doane,** Portsmouth, N.H.

Who was that on the cover?

Can you tell us about the lovely boat on the cover of the September 2008 issue? (The one with the American flag hanging from her stern). What kind of boat is it?

– **Phil Hall and Anna Schrenk,** Chula Vista, Calif.

She's a Sam Crocker ketch

The boat is *Chautauqua*, a 1928 Sam Crocker ketch owned by Joseph Zaraschi from Essex, Connecticut.

I took the photo from the dock at the Connecticut River Museum in Essex, Connecticut, right on the shores of the Connecticut River. Just as an FYI: in early fall, the cool morning air combines with warm water temperatures to create the perfect atmospheric conditions for this type of sun-rising-

through-fog photo opportunity. All the elements have to be in play at the right time for these conditions to exist.

– Paul Rezendes, Royalston, Mass.

Pick of the issue

We've added a new ongoing boat-photo page on the *Good Old Boat* website. Since we announced this new page in our December newsletter for subscribers, new and creative and fun sailboat photos have been arriving steadily. Have a look! It's at: <http://goodoldboat.com/reader_services/reader_photos.php>

Each time we're ready to print a new issue of *Good Old Boat*, we'll choose a photo to print in that issue's Mail Buoy. The sender will receive a good old ball cap or T-shirt.

This is the first "winner," the 47-foot Tancook schooner named *Sara B*, (see photo at right) sent by Susan Peterson Gateley. Susan and Chris Gateley purchased the *Sara B* on eBay, spent several years refitting her, and have been enjoying the admiring glances she brings ever since.

– Editors

Another Cutless bearing tip

I found Barry Hammerberg's article, "Fixing that Cutless Bearing," in the September 2008 issue very useful and interesting. Yet there are a number of ways to skin this cat. While uncoupling and removing the shaft (I needed to do this as I was replacing the packing gland at the same time) may be the hardest part of this job, here's how I made this job a bit easier.

Since the boat must be out of the water to replace the Cutless (and packing gland) — and it's normally cold here on the Chesapeake Bay by the time I get hauled for the winter — I found that simply dropping the strut after uncoupling the shaft made the job much easier. I could now take the strut, with shaft and prop in place, home to my warm workshop in the basement. Once there, I removed the shaft easily but found I had to drill out the two Allen screws that held in the old bearing. Since I didn't have a Cutless puller, I simply inserted a hacksaw blade into the old Cutless and carefully cut the old bearing in half. I was very careful not to score the inside of the strut.

I froze the new bearing in my freezer for a few days to contract its size a tiny bit. I'm not sure that helped, but once I coated it with dishwashing liquid, it slid into the strut with only a few strokes of a rubber mallet and a 2 x 4 to keep from damaging it. I then retapped the two holes for new setscrews, inserted the shaft, and waited for a warmish day to re-insert the shaft and re-bolt the strut.

– Warren Milberg, Annandale, Va.

No sweat

Do you boat in the shoulder seasons? Or do you boat in areas where cool overnight temperatures contribute to the formation of condensation on your portlights, hatches, and their metal frames? Ventilation can certainly solve a lot of those problems. However, when the temperature dips and it's time to close up some ventilation, how can you prevent the condensation from dripping from portlights, hatches, and their metal frames? After waking up too many times in the early morning hours to water droplets on my forehead, I knew there must be another solution.

Before moving to the West Coast of British Columbia, I lived in northern Alberta in an older home with poorly insulated windows. To prevent water condensation on the windows from turning to ice, during the winter season, I installed shrink-wrap plastic on the inside of the windows. The special plastic is attached to the inside of the window frame with double-sided transparent tape and then heated with a hair dryer to shrink the plastic to an air-tight seal and create a layer of air between the warm moist house and the cold dry outside weather.

Two years ago, in the fall, I shrink-wrapped all the hatches and portlights on my boat. I cruise during the wet and cold winter season in and around the Gulf Islands of British Columbia. After a week of dry and clear portlights during the Christmas holidays in temperatures that ranged from 30 to 50° F, I was sold. I kept my cabin at a comfortable 68° F during the waking hours with no condensation on the windows and hatch covers.

Approximately $10 covers the cost of the double-sided tape and plastic. They're sold in packages in the insulation departments in many hardware stores. I bought the size for a double sliding door and had enough materials for two years.

Note that some ventilation was still necessary to circulate the air inside the boat. I also insulated the inside of the hull with ½-inch closed-cell foam four years ago. I glued the foam to the bare hull of my fiberglass Ontario 32 sailboat. This prevented the hull from sweating in all the areas where it was exposed to the warm moist air of the cabin.

My father-in-law performed the same operation on the 3- x 5-foot parlor windows on his 46-foot West Coaster Trawler for his summer cruise. He cruises extensively along the full British Columbian coastline to Alaska. The shrink-wrap prevented the cool draft that can develop on a large window surface in cooler weather as well as any condensation buildup.

– **Harvey Hall,** Nanaimo, British Columbia

There she goes (again)

I can't believe Karen said "sailors are not farmers" in "The View From Here" (January 2009). My wife and I have a farm in Nebraska and a good old sailboat, a Cal 25 MkII, in Kenosha, Wisconsin. Finding time to farm and sail is a juggling act because farms need constant maintenance and so do boats.

And I do feel Karen's pain about not being able to plant sunflowers without the local wildlife digging them up. We have a garden and many flowers planted around the property. There are two required gardening tools you need to successfully have a garden and flowers:

1. fencing around every living thing, metal not plastic (rabbits have teeth)
2. a gun

We also grew sunflowers last year, surrounded by fencing, and they were huge. Of course, when I hung the flower heads up to dry in the barn, the squirrels got to them. Hadn't thought of that part. I was probably out sailing at the time.

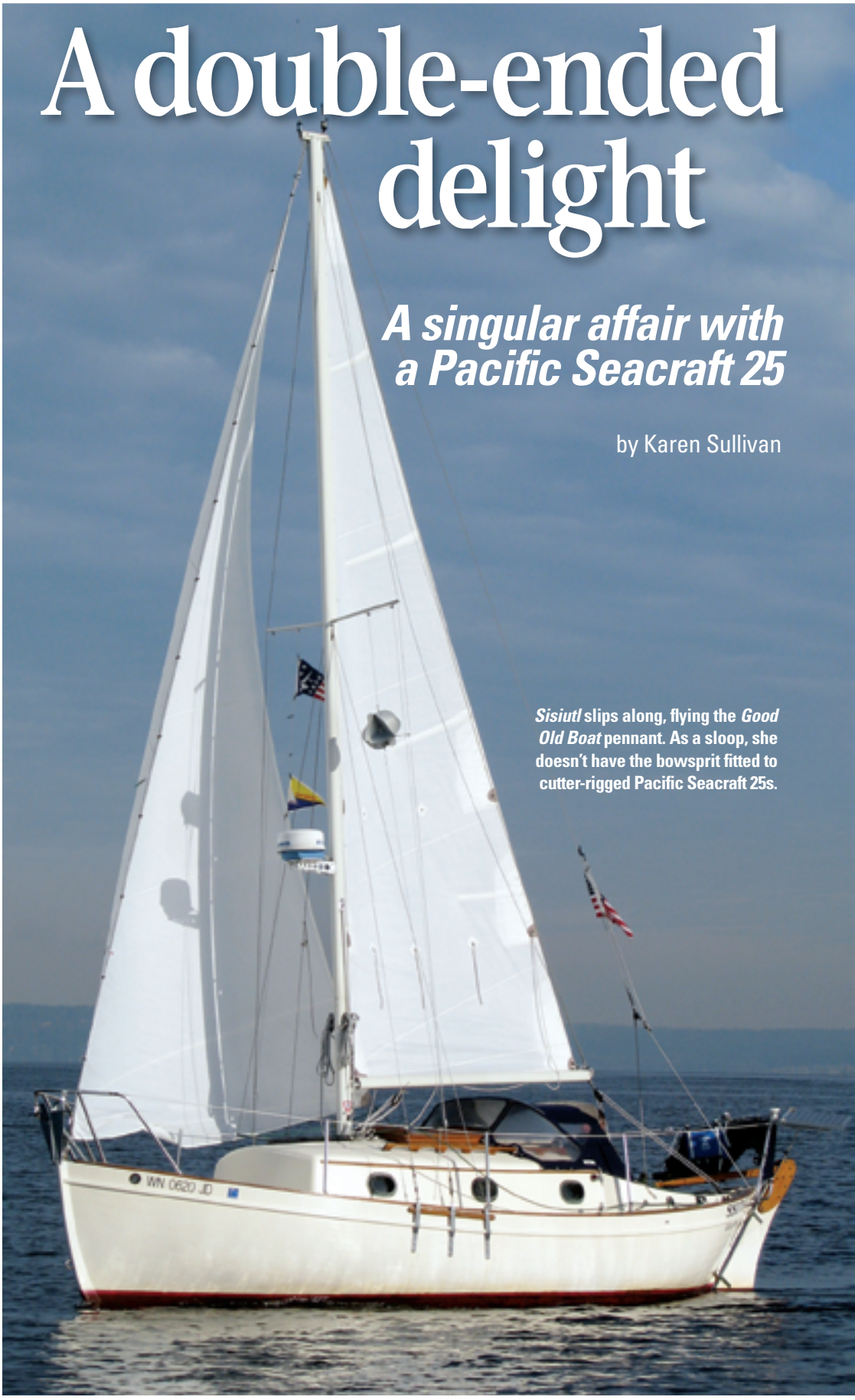
– **Ray Rapp,** Howells, Neb.

Send questions and comments to *Good Old Boat,* 7340 Niagara Lane North, Maple Grove, MN 55311-2655, or by email to jerry@goodoldboat.com.

A double-ended delight

A singular affair with a Pacific Seacraft 25

by Karen Sullivan



Sisiutl **slips along, flying the** ***Good Old Boat*** **pennant. As a sloop, she doesn't have the bowsprit fitted to cutter-rigged Pacific Seacraft 25s.**

There's just no way to explain how a beautiful boat can capture its owner's heart. You'd think that out in cyberspace there would be some searchable scientific insight on this topic: a clinical trial or two with sensors, gauges, control groups, and placebos. But no; it remains a mystery. All you'll find when you Google the words "romance" and "sea" together are YouTube re-runs of *The Love Boat* and some ads for sterling-silver flatware. A definitive explanation for the romance of the sea and the love of boats that sail upon it remains elusive and ephemeral . . . as maybe it should. Steve Duncan certainly thinks it should.

Steve started sailing at age 14 in Puget Sound on his father's Newport 27. He bought his first boat in 1988, a Sierra 26 named *Vela*, and spent a lot of time cruising "the islands," as locals call the beautiful San Juans. He owned *Vela* until 1997, when, at the urging of a spouse who had the antibody to the sailing bug that had chomped Steve, he sold her. Boatless in Seattle, with all that gorgeous coastline, he turned to the solace that so many desperate men choose: sailing magazines.

It was a long dry spell until one day in March 2004, when he picked up a copy of *Good Old Boat* at his dad's house. There she was . . . the cover girl. A lovely Pacific Seacraft 25. He gazed at her sweet lines, contemplated that saucy sheer, and, oh my goodness, that rudder made his heart beat fast. But she was a model in a magazine and he was just a beached sailor.

Soon after that, he told his spouse he wanted to buy another boat. He'd find

The roomy foredeck with its high bulwarks and the wide side decks contribute to crew safety, and the oversized chainplates convey an idea of the boat's ruggedness.

Because of the outboard rudder, the tiller takes up little room in *Sisiutl's* cockpit which, being compact, has seagoing potential. A solar panel helps keep the battery charged when the boat's at sea.

one she liked too. She didn't say no, so he listed the three important factors that would lead him to his next boat. These requirements were hard and fast, immutable as the pyramids: the boat absolutely *must* have standing headroom (Steve is 6 feet 2 inches), it *must* have wheel steering, and it *must* have an inboard diesel engine.

He drove to Anacortes to see a steel 32-footer that incorporated all three features on the list, but it left him flat. Something was missing. The yacht broker, a wily observer of human nature, suggested that Steve take a walk down the dock to see another boat. "I know it's not what you want," said the broker, "but why not just have a look?"

So he did. And there she was . . . the cover girl. Talk about the ship that launched a thousand smiles. "Her lines just caught me," says Steve. "That sheer, that double-ended beautiful boat sitting at the dock on a sunny day, I was completely hooked. She had full *kneeling* headroom, a great *tiller*, and an inboard diesel. I thought, 'Well, one out of three ain't bad.' "

Steve drove home and was sleepless in Seattle. "I was so blasted smitten by those lines that I couldn't get her out of my mind," he remembers. Then he worried: What if somebody else buys her? (Somebody — ironically, a friend of his — almost did.) He called the broker the next morning, arranged sea trials, threw his list to the wind, and bought her.

Sure, there was the headroom issue. But a crusty old salt down the dock said, "You know, Steve, there're only a couple of things I do down below, and I do none of 'em standing up. Do you really need standing headroom?"

The massive rudder implies strength.

> **"'I know it's not what you want,' said the broker, 'but why not just have a look?' So he did. And there she was . . . the cover girl."**

Romance in names

Steve kept the boat's tongue-twister name: *Sisiutl*, pronounced Sis-YOOL. "It never fails as a conversation starter," he explains. In Pacific Northwest Indian folk art, legends, and songs, the Sisiutl is a mythical two-headed sea serpent that has tremendous healing powers. It guards homes from evil spirits and canoes from misfortune.

As for why he kept the boat's original hailing port, a tiny village called Gulkana on the confluence of Alaska's Gulkana and Copper Rivers, he explains, "It's more romantic-sounding than Everett." Alas, his spouse never took to the romance of the sea and didn't need a *Sisiutl* guarding the house either.

Single once again, Steve carried on. He built a teak mount for the new ICOM 504 radio and added a 40-watt solar panel, which keeps the batteries topped off even in the cloudy Northwest. He also installed a Raymarine GPS plotter, LED interior lights, and new wiring, including a Blue Seas power panel. Having come from Alaska, the boat already had radar and an Arctic furnace, and the previous owner had replaced the corroded aluminum fuel tank, something that is an issue on older Pacific Seacraft 25s.

Sisiutl desperately needed new sails. After the settlement emptied his house of most of its furniture, Steve discovered that it made an excellent sail loft. So he bought a Sailrite sewing machine, sailcloth, and instructions and spent the winter making a new mainsail and a 130-percent genoa. He did a good job of it; the sails look and set as if they had been made professionally.

***Sisiutl's* main cabin is small but cosy. Steve's custom radio installation can be seen outboard, and the massive bronze ports suggest the boat's seagoing ambitions.**

Like all the boat's features, the galley is compact. The quality of Pacific Seacraft's craftsmanship is apparent in the woodwork, which has survived 30 years of use very well.

Humble forebears

Despite her genteel charms, the Pacific Seacraft 25's lines and origins are pure working class. Her designer, Henry Mohrschladt, found inspiration in the practicality and tradition of a past century: he based the boat's lines on a small and nimble craft that had been in use in New England since the late 1850s: the No Man's Land boat.

These craft were double-ended and easy to sail and row — they had to be. They were launched and landed through surf on the beaches of Martha's Vineyard and Nantucket. Their crews sailed them to offshore fishing grounds laden with supplies and sailed them back laden with fish. Those workboat origins, together with first-rate construction practices, have given the Pacific Seacraft 25 an enduring authority you can sense even before you sail one — here is a pocket cruiser that can take it when you put to sea. This has earned the enduring affection, admiration and, yes, love of a whole new generation of owners — make that stewards — who keep a lively dialog going on their website.

Pacific Seacraft 25s have been sailed coastwise and offshore, from gunkholes in quiet bays to far-flung islands across the Pacific Ocean. They sail on days when others stay in the harbor, because this boat likes it windy. "I like to take her out in a good blow," says Steve. "She's seaworthy as all getout. If you set the sails right, there's no weather helm, and she almost steers herself. She's easy to maneuver and she'll heave to very well."

With a 4,750-pound displacement that includes 1,750 pounds of encapsulated lead in the keel; a hull built with 10 hand-laid layers of cloth, mat, and woven roving; surprisingly high bulwarks on the foredeck; and a double-sealed hull-to-deck flange, this boat feels as solid to its modern-day owners as the original No Man's Land boats probably felt to theirs. Six bronze opening portlights and superb teak joinery call attention to the high standard of finish, and the tabernacle, in which the mast can be raised and lowered, makes the Pacific Seacraft 25 a trailerable cruising boat.

Love's hurdles

This is not a boat that loves to sail close to windward like a modern raceboat — she doesn't like short choppy head seas. The 1-cylinder YSM-8 will, according to Steve, "... shake your fillings out of your mouth." Many owners are replacing those old bangers as they wear out and the engine compartment has room enough for a decent-sized engine.

Steve Duncan is all smiles as he sails *Sisiutl* in his home waters in the Pacific Northwest.

“. . . I could smell the flowers of Buchardt Gardens on the wind. It was like smelling a tropical island destination.”

Although the 5-foot 2-inch headroom can be an issue, Pacific Seacraft’s innovative zippered headliner cushions bumps. It also allows for easy access to all the wiring.

The bridge deck is not high enough, at 9 inches. Keeping the lower dropboard in helps and, if it’s rough, the second one should be in too. A door in the forward cabin gives access to the chain locker, but it can also dump the chain onto the V-berth if it’s piled up. A hatch in the cockpit sole allows better access to the engine than does the one in the cabin, but you have to undo 18 bolts to get in there.

Future improvements for Steve include repowering with a larger, quieter, engine and replacing the standing rigging. This summer he hopes to cruise Barkley Sound on Vancouver Island’s rugged west coast.

But ask him about his most enjoyable cruise ever and his answer is a blend of past and prospective: “I was sailing from the San Juans to Victoria, British Columbia, on a beautiful day. As I sailed down Todd Inlet, I could smell the flowers of Buchardt Gardens on the wind. It was like smelling a tropical island destination, and I pretended that’s what it was.”

If you have ever had your heart captured by a boat’s sweet lines and seakeeping abilities, and if you have an abiding appreciation for the mystery and romance of the sea, then you are one of the lucky ones. You know that it’s as natural and mysterious as falling in love. If you haven’t had your heart captured yet, don’t worry. You’ll know it when it happens to you.

“Seems like I’ve owned this boat forever,” says Steve.

Karen Sullivan has sailed small boats, then large boats, and now back to a good old small boat, a Dana 24. She sailed it up to Alaska, where she cruised for 5 years. Now she sails out of Port Townsend, Washington.

Clean lines and a clean wake — the Pacific Seacraft 25 is a capable pocket cruiser that can take you almost anywhere.

Pacific Seacraft afloat again

In 2007, after some uncertainty about the future of the Pacific Seacraft company, a couple of knights in shining armor stepped forward and purchased, at a bankruptcy auction, the assets and rights to manufacture and sell Pacific Seacraft sailboats. Those knights, father and son Reid and Stephen Brodie, did more than acquire the molds. They also convinced key managers and skilled craftsmen familiar with the Pacific Seacraft manufacturing operation to move east with them to North Carolina.

The new Pacific Seacraft crew set up shop in Washington, North Carolina, and began to finish the partially built boats trucked from California. By October 2008, they had three completed and displayed them at the Annapolis boat show along with one all-new boat built from the mold up. It was obvious at the dock that the Brodies’ team of experienced boatbuilders will be producing work of the highest quality as it continues to build the Pacific Seacraft 31, 34, 37, 40, and 44, all designed by Bill Crealock.

Sailors everywhere will be pleased that Bill Crealock’s designs have survived and are in good hands. For owners of existing good old Pacific Seacraft boats, this means that parts will continue to be available for the foreseeable future. They can reach the new company by phone (252-948-1421) or at its website <http://www.pacificseacraft.com>.

Three tough little cruisers

Compact craft with offshore ambitions

by Ted Brewer

The three boats in this group — the Pacific Seacraft 25, the Bristol 24, and the Francis 26 — represent very different approaches to designing a small cruising yacht. All are full-keel hulls and, though the boats are on the small side for the big waters, it appears their designers had much more than inshore or lake cruising in mind when they started putting lines on paper.

Thanks to their husky displacement, the Francis and Bristol have similar comfort ratios to many yachts 5 to 6 feet longer. Having a lighter displacement, the Pacific Seacraft 25 doesn't fare so well and will be a bit corkier than the other two, but her comfort ratio is still better than that of the average small cruiser and compares well with at least a couple of 30-footers I've reviewed on these pages.

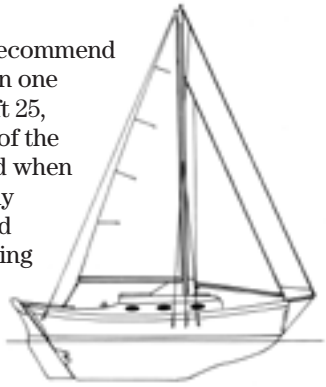
The relative performance of these three is not easy to judge, but none of them will be particularly fast or weatherly. In my opinion, the designers rightly chose to emphasize comfort, steadiness, and seaworthiness at the expense of out-and-out speed and windward ability. These small boats appeal to the more adventurous sailor and may often be far at sea in less than ideal weather conditions. Then, the solid capsize numbers of the Francis and Bristol will be reassuring to the crew and the loss of a fraction of a knot of speed or a degree or two to weather will be quite inconsequential.

Higher capsize factor

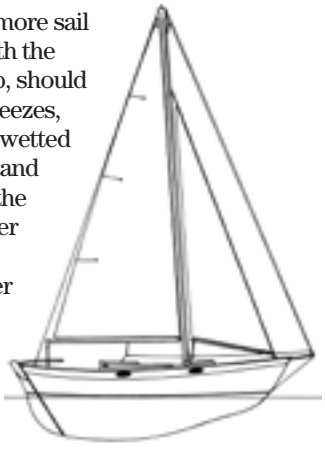
A slightly higher capsize screening factor, along with her moderate displacement/length ratio, puts the Pacific Seacraft 25 in the category of an able coastal cruiser, rather than a small oceangoing yacht. While many less able craft have made heroic voyages, I cannot recommend a moderately light 25-footer, even one as capable as the Pacific Seacraft 25, for a major ocean passage. Part of the problem is that the weight added when equipping and loading a relatively light boat for a long voyage could raise the center of gravity, reducing her chances of a quick recovery in a knockdown or capsize.

	Pacific Seacraft 25	Francis 26	Bristol 24
LOA	24' 6"	25' 10"	24' 7"
LWL	21' 0"	21' 3"	18' 1"
Beam	8' 0"	8' 4"	8' 0"
Draft	3' 3"	3' 10"	3' 5"
Displ.	4,750 lb	6,800 lb	5,920 lb
Ballast	1,750 lb	3,500 lb	2,500 lb
LOA/LWL	1.17	1.22	1.36
Beam/LWL	0.38	0.42	0.44
Displ./LWL	229	316	447
Bal./Displ.	0.37	0.51	0.42
Sail area	250 sq ft	340 sq ft	296 sq ft
SA/Displ.	14.2	15.2	14.5
Capsize no.	1.9	1.76	1.77
Comfort ratio	20.7	27.4	28.4
Year built	1979	1975	1969
Designer	Henry Morschladt	Chuck Paine	Paul Coble

Both the Pacific Seacraft 25 and the Bristol 24 are somewhat undercanvassed, with sail area/displacement ratios under 15, and I feel that both could handle more sail without a problem. The PS 25, with the lightest displacement of the group, should move along nicely in the softer breezes, although she also has substantial wetted surface due to her long waterline and full keel. Because skin friction is the prime source of resistance at lower speeds, the Bristol 24 should do well in light air as, with her shorter waterline and moderate draft, she probably has the least wetted surface of the three. The Francis's taller rig, and 44 square feet more sail, might still give her an edge through the zephyrs.



Pacific Seacraft 25



Francis 26

I expect the Pacific Seacraft 25 to perform nicely in a medium breeze. The Francis 26 is definitely the one to beat when the wind pipes up, thanks to her very high ballast ratio and 5-inch deeper draft. Her ballast will be carried lower and that will add to her stability and reduce leeway. The Bristol, with her husky displacement and short waterline, could be the slowest of the three in a stiff breeze but she will pick up waterline length as she heels, so the difference may be slight in the long run. Still, with a lower ballast ratio and 5 inches less draft, she will struggle to hang onto the Francis in a tough windward slog.

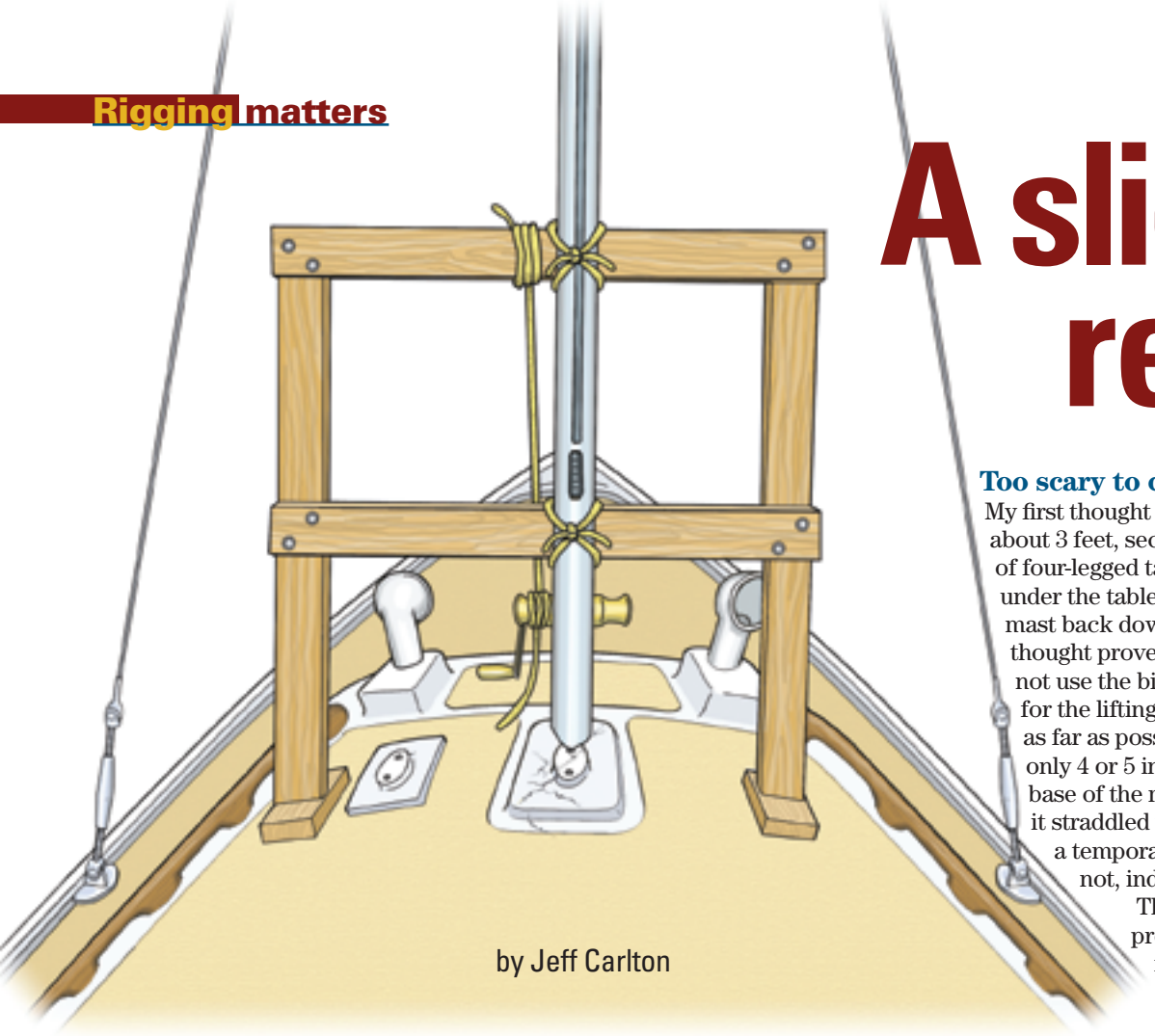
Bristol 24

I would urge anyone searching for a small boat for extensive coastal cruising or a long bluewater passage to also compare these three small cruisers with the Allegra 24, the Flicka, the Dana 24, and the Falmouth Cutter I reviewed in the November 2006 issue. They all have most of the virtues essential to the serious cruising sailboat and the choice could come down to the quality, the accommodations and, ultimately, the almighty dollar.

Ted Brewer is a contributing editor with Good Old Boat *and one of North America's best-known yacht designers. He has designed scores of good old boats . . . the ones still sailing after all these years.*

A slightly repair

by Jeff Carlton



Lashed just tightly enough to support the frame, the mast was free to rise up when the line tied to the top crosspiece was taken up on the winch.

No matter how you looked at it, we had a serious problem. Our boat's mast step was compromised and would have to be repaired.

In December 2006, following an A-plus survey, I bought a 1977 Pacific Seacraft Mariah with a deck-stepped mast. I had it trucked from Florida to Lake Guntersville in Alabama and, to get the most use of the expensive crane, I stepped the mast the day the boat arrived, unaware that water had entered the step and delaminated the fiberglass skin.

In preparation for launching in May 2007, I tuned the rig. Ultimately, the boat's movement in the slip added just enough stress for the step to develop horizontal cracks on its fore and aft edges and one running lengthwise under the mast shoe. The cracks looked like a capital H turned on its side. When I calmed down and called the surveyor, he said he had only looked for moisture in the hull. (Contact me if you want his number.)

The idea of dismantling the ProFurl over the water, renting a crane, and pulling the mast, only to have to do the whole procedure again in reverse after making the repair, dismayed me utterly, until I asked myself, "What would Captain Jack Aubrey have done?" One of my favorite sequences of the *Master and Commander* movie was his refit at sea. And hadn't I read in Jack London's *The Cruise of the Snark* how one man stepped a mast with nothing but a hull for help? There had to be a way to fix this thing without all the work, expense, and drama of taking that darned mast off the boat.

Too scary to contemplate

My first thought was to jack the mast up about 3 feet, secure it with some sort of four-legged table, repair the step under the table, and then lower the mast back down. Too scary. The next thought proved to be the winner. Why not use the big winch on the mast for the lifting, open the turnbuckles as far as possible, raise the mast only 4 or 5 inches, and move the base of the mast off the step while it straddled the main bulkhead on a temporary step and shoe? Why not, indeed?

The most serious problems I faced were figuring out how to use the mast's own winch to raise it and how to prevent the disconnected base of the mast from sliding and bringing down the whole rig. Did I mention the pack of head-shaking naysayers taking bets from a safe distance on the multi-boat mast-crashing disaster that was sure to follow?

A frame to lift it with

My son, Kyle, and I built a lifting frame out of three 2 x 6s. We cut off two 6-foot vertical legs at angles to match the crown of the deck. We attached feet to the legs with 4-inch deck screws. Then we bolted two 4-foot crosspieces horizontally to the legs: one at the top and the other in the middle where it wouldn't interfere with the winch. Four-inch bolts with washers and nuts made everything tight. The lifting frame looked like a squared-off A.

We lashed both crosspieces to the mast securely enough to keep the frame upright and loosely enough for the mast to slide upward and through the lashings. We positioned the feet where the force of the operation would be supported by the main bulkhead.

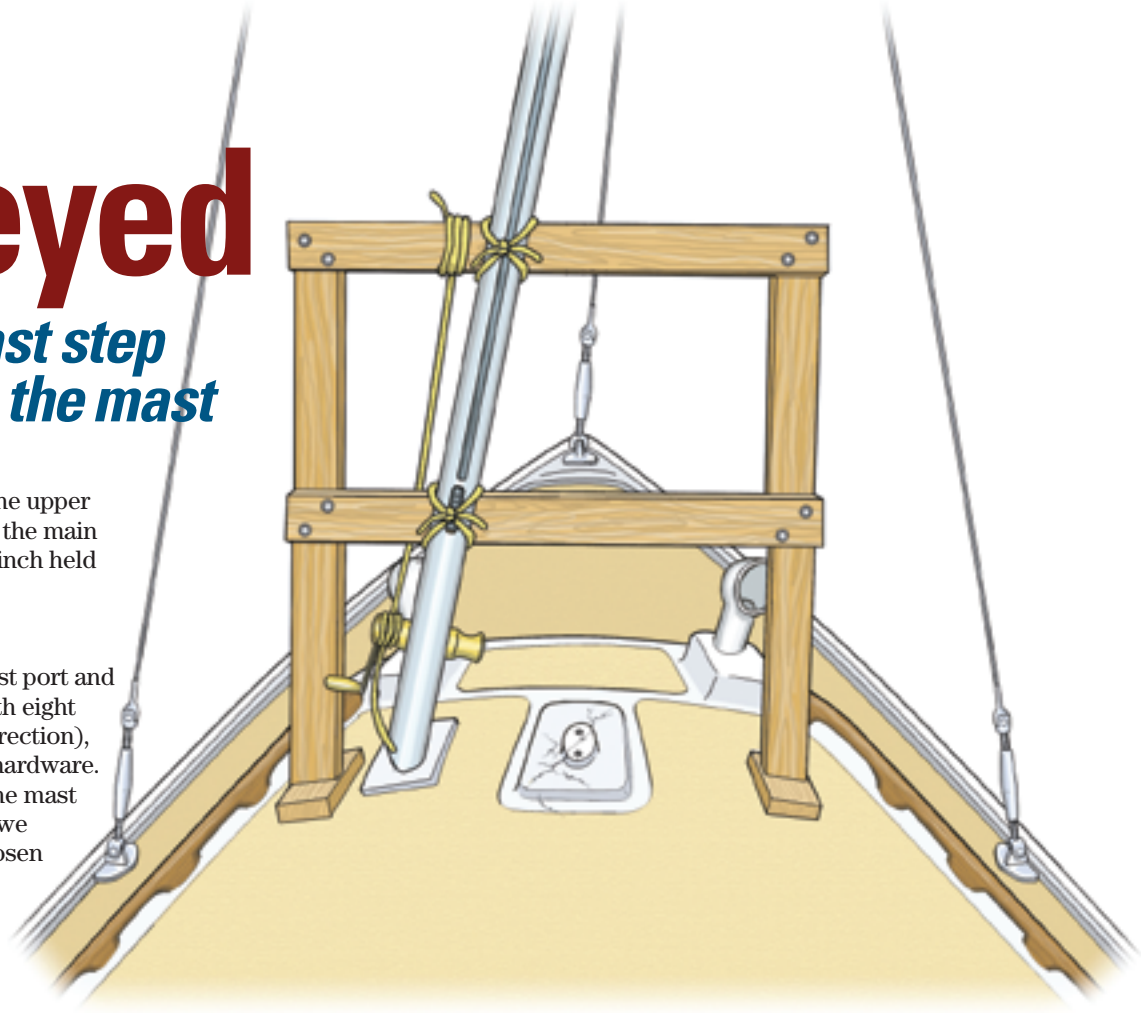
We made and placed a temporary plywood step and shoe to port of the step and between it and the foot of the lifting frame. We lined the bottom of the step with sponges to protect the deck and keep it from sliding. We centered this over the bulkhead for support.

Next we tied a 10-foot length of 1-inch double-

ILLUSTRATIONS BY FRITZ SEEGERS

cockeyed

Fixing the mast step without pulling the mast



With the mast secured on its temporary step to the side, the work of repairing the mast step could proceed unhindered.

braided line to the center of the upper crosspiece and led it down to the main winch. The cleat below the winch held what we got from the lifting.

A maze of braces

We braced the base of the mast port and starboard and fore and aft with eight ratchet-straps (two in each direction), all of them secured to heavy hardware.

This controlled lifting of the mast turned out to be harder than we expected. The idea was to loosen the turnbuckles and ratchet straps just a little, crank on the winch, raise the mast through the lashings as far as possible, secure the tail of the lifting line on the cleat, and repeat. Make that: repeat about 100 times. What made it a pain was the fact that we were only two, my son and I, to man the nine turnbuckles and eight ratchet straps. We would go to bow and stern, port and starboard, round and round, making slight adjustments and lifts. This was no pleasant stroll around the deck; the spider web of straps made each circuit more like a low hurdles course. To be more efficient at this, you really need one grinder for lifting and four helpers for loosening and tightening.

We ran into one issue with the turnbuckles fully extended: the new standing rigging — being at the beginning of its life of stretching — would not quite give us enough room for the base of the mast to clear the top of the shoe.

Our remedy was to secure a halyard from the masthead to the stern through a bridle we ran through the two hawse holes. We secured another halyard to the port aft-lower shroud turnbuckle base. With these extra precautions, we were able to detach the port half of the split backstay and the port aft-lower shroud. This move allowed the mast to go up and tilt to starboard, giving us the room needed to clear the shoe and disconnect the in-mast wires. Most boats probably have enough rigging play to make this step unnecessary.

Pretty as you please

To shift the mast base to port, we loosened the starboard ratchet straps and tightened those to port. When the mast was over the temporary shoe and step, we uncleated the lifting line and eased her down as pretty as you please. We went wild with excitement. The worried look on my neighbor two boats down encouraged us to carefully tighten all the stays, shrouds, and ratchets.

Having to look at my boat with her mast askew and the lifting frame resembling a gallows was the worst part of this project. The unnerving sight prompted me to finish the repair ASAP.

With the mast out of the way, repairing the step was straightforward. Using a grinder, I cut off the gelcoated top layer of glass, being careful to leave the sides of the step intact. What I found underneath made me glad I'd gone to all this trouble. The double layer of 1-inch marine ply was soaked through. An hour with hammer, chisel, sander, and grinder produced an empty box ready for epoxy, heavy fiberglass mat, ¾-inch marine ply, and a plate of ½-inch stainless steel.

Since we knew the drill, putting the mast back in place was much easier. When it came down on the rebuilt mast step, we shouted with joy. As soon as the stays and shrouds were tight, we dismantled and removed the frame. What a relief it was to have the mast sitting straight up on a strong and dry step, even though the accredited surveyor tried to assure me that water-soaked lumber retains most of its strength. Still want his number?

Jeff Carlton is in advertising full-time, pastors a small church part-time, and with his wife, Cheri, sails their 1977 Pacific Seacraft Mariah, Sea Fever, *whenever he can.*

Mast raising made

Two good old boaters take the A-frame to the tabernacle

by Loren Lyndaker

Over the past several years, our cruises on *Whippoorwill*, our Cape Dory 27, have taken us to several places where we have had to lower the mast and carry it on deck in order to pass under low bridges. A few experiences along the way have inspired us to make changes to the boat to facilitate the procedure.

On a couple of occasions, when traveling across open water with the mast down, the mast began to move about too much. In each case, we resolved the problem, but only after venturing forward with a safety harness in less-than-favorable conditions. Once, we returned to a marina on the Hudson River to find that the mast supports we had stored there two months earlier had disappeared — not a big expense but an unexpected challenge.

When we stored our boat in Maine for the winter of 2004-05, during our Down East Circle cruise, we were required to take the mast down. We did all the prep-work for both operations on our 32-foot mast. Many times at our home marina, we (the captain and first mate) have raised and lowered our mast in about 15 minutes with the help of a gin-pole and a friend. So, when the yard charged more than $250 to unstep the mast in the fall and more to step the mast the following June, that planted the seed for this project.

Our goal was to create a system by which we could raise and lower our mast and that would include the hardware needed to secure the mast on deck for traveling in canals and under fixed bridges. As well as saving us money, carrying all the parts of the system on board would give us greater freedom in choosing our cruising grounds.

Weighing the options

We considered lowering the mast forward, but the jib furling hardware makes that difficult. Also, much more than half of the weight of the mast, including the radar antenna, would be forward of the bow pulpit when the mast was unstepped. We therefore designed a system to lower the mast toward the stern.

Whippoorwill has a hard dodger, which meant, we would have to raise the pivot point of the mast above the cabintop so the mast would clear it. The answer was a tabernacle. A nautical glossary defines a tabernacle as "the deck housing (usually a raised socket or post) for the heel of a mast, often with a pivot or hinged so the mast can be easily lowered . . ." The tabernacle, with its support system, also provides the means of securing the mast when it's stored on deck.

We designed and built the tabernacle and then experimented with a procedure to raise and lower the mast. We used the mast-raising method described by Ron Chappell in his article in *Good Old Boat* in May 2001. It worked, but it was clear that *Whippoorwill's* nearly 60-year-old two-person crew couldn't comfortably complete the task

without assistance. Because of the forces involved with our considerably larger mast, we quickly determined that a rigid A-frame would be a better choice for us than a yacht-braid-stabilized gin-pole.

Easy does it

After completing the usual preparations for unstepping the mast, we connect the legs of the A-frame — which is the 12-foot boom and matching aluminum tubing — and put it in place at the bow. We have to raise the mast slightly to insert the pivot pin through it and the tabernacle. We then attach to the A-frame halyards from the masthead and a block and tackle from the bow. We wrap the line from the tackle on the windlass.

Additional masthead lines connected to bridles at either side of the mast minimize sway as we lower the mast. After we release the forestay, one of us gets the mast moving by putting pressure on the backstay. The other eases it down with the tackle. This gives us good control over the lowering process, which we can easily stop or reverse. The first person, who has moved out from under the mast for most of the lowering, makes sure it lands safely in its support at the stern.

Stepping is a bit more work but not because of the lifting. The challenge is keeping lines and standing rigging from fouling — an unnoticed hang-up could put unsafe loads on the system.

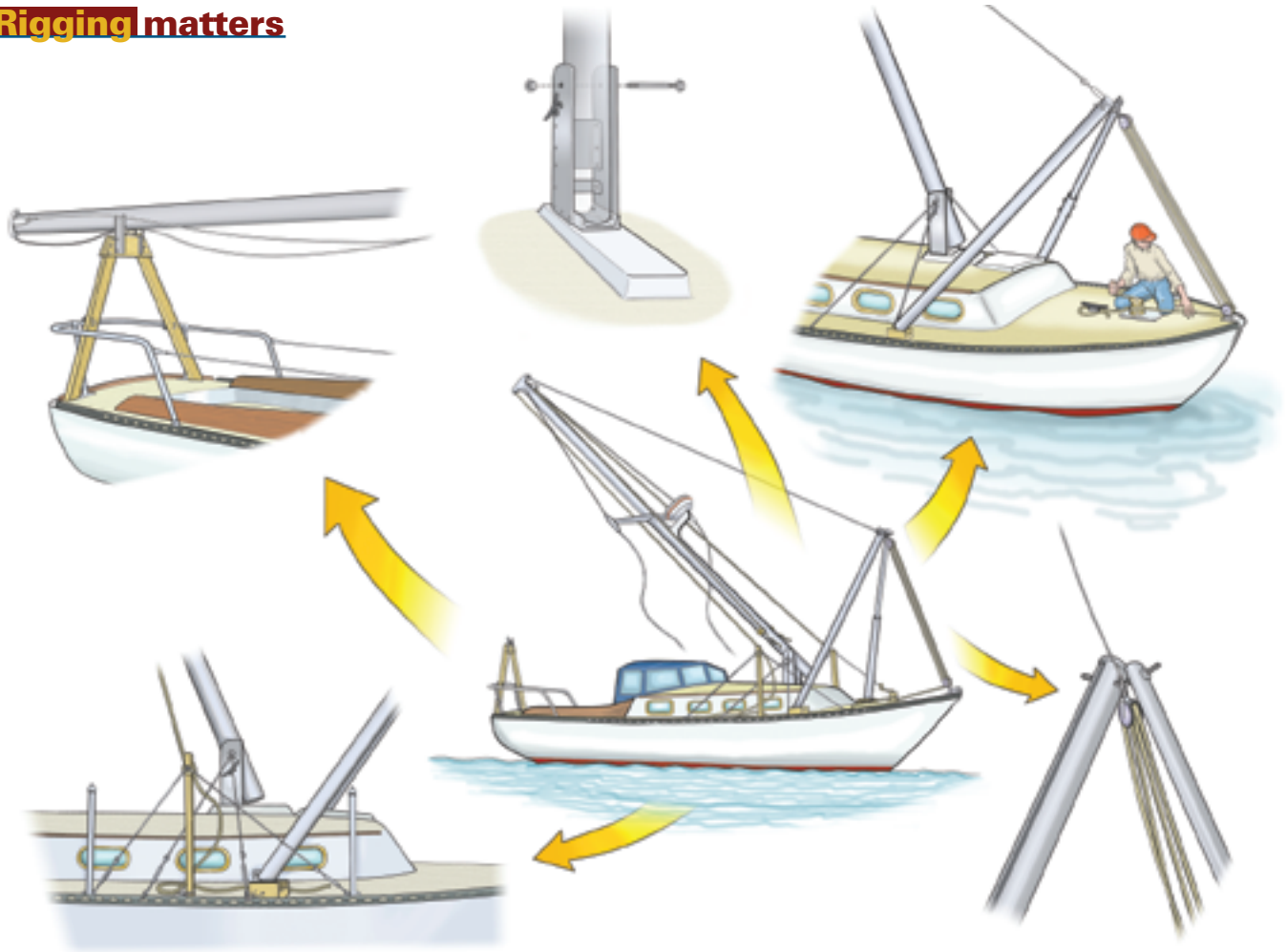
Constructing the tabernacle

After removing the original mast support from the cabintop and taking some measurements, we used ¼-inch luan plywood to construct a mockup for the tabernacle. We fitted this mockup to the mast and found the pivot point. The tabernacle itself is constructed of aluminum and is 5 by 6 inches by 23 inches overall. The side pieces are ⅜-inch thick, 5 inches wide, and 23 inches long. The bottom, front, and back supports are sections of 5 x 1.885 x .325-inch 6061 T6 aluminum channel cut to various lengths (10 inches for the back, 7 inches for the bottom, and 2 inches for a front piece that is fitted after stepping to secure the mast in the tabernacle). After considerable investigation into construction options, we ordered the material cut to length from OnlineMetals.com.

We used appropriate parts of the plywood mockup as patterns in the construction that followed. We cut an arc at the upper aft corner of each of the side pieces, filed them to remove burrs, and sanded them smooth. For the mast pivot point, we drilled a ½-inch hole in each side plate and, with considerable care, elongated the holes to allow the upward movement the mast needs when it rotates.

Next we assembled the four major pieces of the tabernacle and marked and drilled them for fasteners. Where clearance to the mast is not a problem, we through-bolted the parts with ¼-inch stainless bolts. The remaining points we drilled and tapped for ¼- by ½-inch long bolts which, when fitted, would be flush with the inside surface. We fitted other hardware, including the cleats, in similar positions relative to where they were on the mast and fastened a ¼-inch stainless-steel U-bolt on each side for attaching support cables when the mast is being stepped up or down.

Down she goes! The A-frame, on facing page, provides the lever arm, the tabernacle, above left, the pivot point, and the windlass, above right, the friction to control the drop and the muscle for the lift. The tabernacle and the mast heel plug await fitting on the boat, below left. Pivot boxes for the A-frame, guy wires to brace the tabernacle, and wooden supports for the side stays all play their part, bottom right.



FRITZ SEEGERS

The tabernacle is the fulcrum around which the whole system for lowering, raising, and transporting the mast functions. All the other components can be dismantled and stowed aboard when not in use.

At this point we took the tabernacle to the boat so we could mark the mast and drill it for a workable pivot point. We inserted a ½-inch outside-diameter, thin-walled aluminum tube in the mast's pivot-bolt hole and secured it with JB Weld. This makes it much easier to pass the bolt through the mast.

Adapting the mast

In order for the flat-bottomed mast to rotate with a 20-inch radius arc, some extra clearance was needed for the aft portion. We create some of this clearance by lifting the mast about ½ inch just before unstepping (to insert the pivot bolt). We gained the rest by modifying the mast.

To check the clearance needed to move the mast through a 90-degree rotation, we drilled a piece of wood the same width as the front-to-back dimension of the mast and mounted it in the tabernacle. That led us to chamfer the aft side of the bottom of the mast, starting ¾ inch up and cutting a curve for about a third of the distance. Since the mast originally stood on a male step and would now simply rest on a flat surface, we made a hardwood plug (shown at bottom left on page 19) for the bottom of the mast to distribute the pressure. We cut the shape and tapered the sides to make it a snug fit. Its contour matched the new shape of the mast heel, and we secured it in place inside the mast with screws, though the tapered fit provides most of the support.

We then drilled the new tabernacle to match the bolt pattern of the old mast step and installed it on the boat using four ¼-inch bolts. We made an aluminum plate to cover the heads of the bolts and to provide a flat surface for the mast.

The deck fittings for the forward- and aft-lower shrouds provide anchor points for the four support cables that attach to the U-bolts on either side of the tabernacle.

The cables are ⅛-inch stainless steel with hand-swaged fittings on both ends. Each cable support includes a turnbuckle so they can be tensioned. We fabricated the connecting hardware from 1 x ¼-inch stainless steel and were able to recycle turnbuckles we'd kept when we replaced the rigging in 2002.

Stowable parts

The exact configuration of an A-frame and tabernacle system would be unique to any vessel. For our Cape Dory, we chose components we could easily take apart and store aboard. We use the 12-foot boom for one side of the A-frame and made the other from two lengths of aluminum tubing, which we chose for its light weight and durability. We ordered two 7-foot pieces of tubing, one with an outside diameter of 2½ inches and the other with an

outside diameter of 2¼ inches. They both had wall thicknesses of ⅛ inch. In theory, this would allow the smaller to slide inside the larger. We chose 7-footers instead of one 12-footer because we could stow the shorter pieces in a cockpit compartment.

When the tubes arrived, the smaller would not fit inside the larger. I used a belt sander, starting with 40 grit paper, to reduce the diameter enough so that about 1 foot of the smaller tube would fit inside the larger one. I drilled a ¼-inch hole through both so we could bolt the two tubes together to form the second half of the A-frame. We use a ⅜-inch threaded galvanized rod with an appropriate bend to connect the boom and tubing to form the apex of the A-frame. Two 5-inch by 7-inch boxes constructed of ¾-inch plywood with two 4-inch sides and two 2-inch sides provide pivot points on the deck for the A-frame's legs, shown at bottom right on page 19. They also protect the deck against possible damage from the A-frame.

Critical elements

The mechanics of the pivot point and support systems during stepping and unstepping are a critical piece of the puzzle. As a result of the first trial, we found that we needed a system to minimize the horizontal movement of the mast as it's raised or lowered. We accomplished this by establishing a pivot point at the same distance above the deck as the mast pivot point but directly above the toerail. The lines we use to center the mast horizontally run from the masthead through these points and then to the deck. Because the radius stays the same as the mast is being lowered or raised, the tension in these lines remains constant.

Each outboard pivot point is supported on a length of 1½-inch-square-section lumber tied to the upper-shroud chainplate and braced to stanchion bases by a pair of ⅛-inch stainless-steel cables with swaged loops at each end.

Secure and on the level

The tabernacle supports the mast base when the boat is sailing, but we needed a support system to handle the forces on it while stepping and unstepping and also to provide a solid point when it's carrying the mast horizontally. The tabernacle is the major component of our system for securely carrying the mast on deck. It eliminates any fore-and-aft movement, it minimizes side-to-side movement at the ends, and it's considerably more stable than any system we've previously used when carrying our mast.

The aft mast support sits on deck just behind the stern pulpit and is attached using U-bolts. It is constructed of wood and has vertical pieces of angle aluminum to support a 1½-inch diameter by 6-inch roller for the mast to lie on.

The roller is made from plastic drainpipe with drilled end caps. This roller takes much of the work out of moving the mast. It can be taken apart

"As a result of the first trial, we found that we needed a system to minimize the horizontal movement of the mast as it's raised and lowered."

easily and stowed in the cockpit lockers. A couple of lines secure the mast in its traveling position, with the top of the mast resting on the roller aft, the main portion on the tabernacle amidships, and the foot on the bow pulpit.

Once we have stripped the sails and removed the boom, as we would have to do for a yard to unstep the mast, it takes us a further one or two hours to prepare for the drop. The actual lowering of the mast takes less than five minutes, after which we need another two to three hours to move the mast forward, secure it for travel, and stow the hardware.

The system's downside is that *Whippoorwill* must now carry a few extra pounds of hardware and lose some valuable stowage space. Approximate material costs in 2006 were $125 for the tabernacle, $120 for tubing, $120 for blocks and 5/16-inch line, and $40 for miscellaneous bits and pieces.

It took some time to achieve this solution, but it allows us to control the costs associated with raising and lowering the mast and gives us more freedom to choose where we cruise. And what better way can there be to fill long winter days in northern New York than by dreaming up boat projects? Our tabernacle meets our needs and will be useful on our next adventure: another trip south along the ICW.

A-frame at the ready, Loren and Betsy Lyndaker prepare for another controlled mast lowering.

Loren Lyndaker, a recently retired math teacher, and Betsy Lyndaker, a retired nurse practitioner, have owned their Cape Dory 27 for 22 years. They have sailed extensively on Lake Ontario and as far afield as the Bahamas. Currently, they are cruising the Intracoastal Waterway south to the Florida Keys.

Armed with sharp tools, blunt instruments, and dull senses, the author excised the top laminate of his boat's deck and the moldering balsa core beneath it.

"Major deck

Four fateful words that spelled six years of work

by Joseph Picciolo

Something must have blinded me to the first words in the Findings and Recommendations section of our boat's pre-purchase survey: "Major deck repair needed." The language was very clear. I know what all those words mean. "Major" doesn't usually mean insignificant, right? So then, *why* is it that I bought the boat anyway that January, had it trucked 800 miles in a blizzard, and paid for a marina slip for the coming spring?

The boat, a 1964 Alberg 35 sloop that I found online, listed with a broker in Maryland, seemed to be the perfect boat for us. And the price seemed too good to be true. Two months and two visits later, the Maryland boatyard chipped away the ice, hauled the boat, and loaded it onto a truck bound for Wisconsin. Several days later, I took delivery of a major deck project.

At this point my memory gets kind of cloudy. I think that if I had had the good sense to be psychoanalyzed at the time I would have heard terms like "pathologically optimistic" or perhaps "reality deprived." I do, unfortunately, remember plopping down $2,500 for the slip and arranging to double my boatyard fees by moving into a shed.

I won't bore you with the details of the six years between then and now, like the time the shed blew away in a storm, exposing my newly laid balsa core to the elements. Or the two sons I've had since buying the boat. (One son equals half as much time to work on the boat. Two: forget it.) I won't discuss the cost of six years of indoor storage or even the expense of 13 gallons of epoxy. And I don't want to talk about the health benefits of grinding and sanding epoxy, polyester, and fiberglass.

I do want to share what I have learned over the course of this experience. If you do anything long enough you are bound to learn a few things. For those who are not familiar with the process of re-coring balsa-cored boat decks, a few methods are available.

Work with gravity

The one I opted for involved making a shallow cut from the top of the deck and removing the top skin. I then scraped out the wet or rotted balsa core, replaced it with new balsa, and replaced the top skin. In many places, where the top skin was in bad shape from repair attempts by previous owners, I had to re-laminate it using fiberglass materials and epoxy.

Many people choose to do the work from underneath to preserve their molded non-skid. My opinion is that this job is hard enough without gravity working against you.

Applying hindsight, the biggest and most obvious mistake I made was not giving enough weight to the survey. I blame this in part on my own evaluation of the conditions of the deck. In January, sodden balsa-cored decks can feel pretty firm underfoot. Ice is structural until it melts. The second biggest mistake I made was underestimating the length of the project. Anyone who has ever tackled a boat project knows that it always takes longer than you think it will. I *knew* that, but I still underestimated by six years.

Working from the top made replacing the core and laminate a little easier. Finishing was a major task, but the result (bottom) has the look of a brand-new deck.

repair needed"

Along the way I made many, maybe thousands, of mistakes with the workhorse power tool of choice for the deck re-corer, the angle grinder. It's surprising how comfortable a guy can get hacking, sawing, and drilling into his boat. All told, I spent weeks filling errant grinder marks in gelcoat. However, by the end, I gained a proficiency that I had only dreamed of in the beginning. I was able to tackle new areas with surgical precision. Now that I have attained a mastery of the craft, I hope to never use those skills again.

Wrong again

When I began the project, I believed I was well equipped with the necessary tools for the job. Oh no, not so! When you set out to do battle, you had better be properly armed. This proved not to be a job for cheap tools. The hardness of fiberglass-reinforced materials is not to be underestimated. Terms like "carbide-tipped" and "industrial-grade" entered my vocabulary. Later, once the cutting is done and things are rebuilt, everything needs to be sanded fair. I now own, literally, a boatload of sanding tools.

An unanticipated benefit to working on the same project for the better part of a decade is that, in addition to growing older and wiser and grayer and poorer, you have a lot of time to contemplate what you ultimately would like your boat to be at the end of it. I wanted my boat to be a Hinckley. Of course, I fell short of this goal, but I was able to incorporate some of the deck features of my favorite boats. I ultimately ended up with a bulletproof deck with some nice design improvements and a decreased likelihood of experiencing future deck leaks.

For those of us who like older boats or can't afford a newer boat, soft spots on deck are an unavoidable reality. They offer a strong bargaining point for a potential buyer and great deals can be found on boats that need deck repairs. Boatyards are thrilled to do the work for you. For a 35-foot boat with substantial core issues, you can expect a repair quote in the $10,000 to $20,000 range.

Be realistic

Does this mean I think you should avoid these boats? Not always but, before taking one on, you should be realistic about your economic and/or time commitment to the project. If, like me, you like power tools and toxic materials, this is definitely your dream project. If you don't, make sure you don't pay more for repairs than the boat is worth.

The other day a young guy was looking longingly at a 35-foot sailboat berthed next to mine at the boatyard. I asked him if he was thinking about buying the boat. He was.

He had already agreed on a price but was a little concerned about what the broker described as very soft decks. I saw in his eyes that same blind love for the boat that I had six years ago for mine. I presented a thoroughly desperate tale of my deck project, fraught with every conceivable mishap and regret. Despite my best efforts to dissuade him, I know he will buy the boat. That's all right. I'll have company as I move on to my next projects: grinding off bottom paint, and repowering, and re-rigging, and replumbing, and . . .

Joe Picciolo is a cinematographer when he isn't working on his Alberg 35, Calliope. *With his wife and two sons, he also sails* Gakika, *an Alberg-designed Bristol Corinthian, on Lake Michigan.*

Grenada's nutmeg, Madeira's chamomile, Croatia's lavender, and natural fiber cloth.

Clean sweetly with

Banish those not-so-good old-boat odors

by Laurie McDonald

When our good friends Jeff and Dawn told us they had just purchased a liveaboard sailboat, I knew what would make the perfect "boat warming" gift: a starter kit of essential oils and natural cleaners that really work and smell great too. This gave me the opportunity to match some of my favorite essential oils to my favorite people.

Essential oils are aromatic liquids extracted from certain species of flowers, grasses, fruits, leaves, roots, and trees. They are effective natural cleansers and don't have the polluting effects of chemicals. I chose the four inexpensive essential oils for this kit for their sanitizing properties as well as for the compatibility of their scents.

- ***Lavender***, a favorite everywhere, has powerful antibiotic, antiseptic, anti-viral, and anti-fungal properties.
- ***Eucalyptus***, with its antibiotic, antiseptic, and deodorizing properties is versatile.
- ***Lemon*** has a fresh, clean scent and antiseptic and antibacterial properties. Its synergy with lavender or eucalyptus gives blends with those oils more punch.
- ***Geranium*** has astringent and antiseptic properties, smells great on its own, and adds synergy and a light floral scent to a blend with any of the other oils I selected.

The last three ingredients for this starter kit are pure white vinegar, natural liquid soap, and natural oil for wood. All of the components of this kit can be found in most health food stores.

Putting oils to work

I explained to Dawn the three ways she could use the oils.

For washing or wiping surfaces, she could make a mixture of water, liquid soap, and essential oils. Water and essential oils combined in a spray bottle would let her mist the air or spray the mixture onto a damp cloth with which to wipe and deodorize surfaces. A few drops of essential oils added to a bowl of warm water will dispel unpleasant odors and scent the air.

As Dawn and Jeff walked me through *Windswept*, I gave them some ideas on how to use the oils for cleaning different areas.

Dawn said that it was difficult to eliminate odors from cooking, baking, and frying in the galley. This is because fat molecules tend to linger in the air long after meals. I suggested a blend of lemon and eucalyptus — using any of the three methods I had just taught her — as an effective solution to unpleasant galley odors.

I also gave Jeff, the dishwasher on board, the antidote to his dishwashing blues: just a drop or two of essential oil in the dishwater (or laundry rinse water) makes these chores more pleasant: lemon for morning zing; uplifting lavender after lunch; and

Lavender from Croatia.


Cinnamon bark from Martinique.

essential oils


Martinique's oranges, lemons, and limes.

geranium, a relaxing floral scent, after dinner. Dawn liked the idea of adding a drop of refreshing lemon oil to the water she uses to clean the icebox.

Jeff had already cleaned the head but a musty odor lingered. My proposal for this area was to wipe all surfaces with my favorite bacteria-busting combination of soap, water, lemon, and eucalyptus oils to kill germs, inhibit bacterial growth, and refresh. Using the spray method or putting a couple of drops of oil inside the toilet paper tube also dissipates any unpleasant odors.

And vinegar, too

Vinegar has many uses on board from cleaning toilets to removing mold and mildew and to leaving glass sparkling. A number of studies, including some conducted by the Good Housekeeping Institute, indicate that a straight 5-percent solution of vinegar kills 99 percent of bacteria, 82 percent of mold, and 80 percent of viruses. I recommended that Jeff and Dawn give the toilet a good dousing of straight vinegar and a few drops of lemon oil to remove scum and clean the pipes.

We opened the shower and locker doors to discover a fusty smell. I proposed washing these areas with a half-and-half solution of vinegar and soapy water and, when dry, wiping them with straight vinegar. A cotton ball dosed with a few drops of eucalyptus and stored in the lockers further inhibits the growth of mold and mildew and lightly scents the area. To make windows and mirrors sparkle, I suggested they mix 1½ cups of vinegar, ½ cup of water, and 8 to 10 drops of lemon oil, then spray the glass surface, and wipe it with a dry cloth.

Jeff and Dawn fell in love with the lovely woodwork inside *Windswept*. The first chore was to wash the wood with natural liquid soap and water. Once it's clean, wood is easy to maintain by adding a few drops of essential oils to natural furniture oil, applying the mixture to a damp cloth, and simply wiping the surface. Lavender added to the wood oil in the cabin makes for restful sleep; geranium refreshes passageways with a light floral scent; lemon adds energy to the galley; and eucalyptus gives a clean, spa-like scent to heads and showers.

Jeff and Dawn were impressed with their cleaning kit and delighted in finding easy, environmentally safe methods for cleaning that leave their new home smelling and looking terrific.

Laurie McDonald, from Canada's west coast, is on a 3-year sabbatical with her partner, Lionel, sailing the Caribbean and Mediterranean. She writes on health issues, travel, and sailing.

Useful oils in the galley

Many odors arise from cooking, baking, and frying; fat molecules in the air require a cleaning/deodorizing essential oil. Eucalyptus, lavender, rosemary, lemon, lime (and other citrus oils including grapefruit, bergamot, mandarin, and orange) are antiseptic and anti-bacterial agents that clean and deodorize.

Kitchen deodorizing blends:

- 5 drops each of lavender, lemon, and mandarin
- 6 drops of rosemary, 5 drops of grapefruit, 4 drops of lemon

Kitchen blends for cleaning/wiping:

- 6 drops of lemon, 5 drops of lavender, 4 drops of eucalyptus
- 5 drops each of lemongrass, bergamot, and orange

After cleaning the freezer, refrigerator, icebox, or oven, add a drop of one of the citrus essential oils to the rinse water to freshen and deodorize.

To clean the microwave, make a paste with ¼ cup baking soda, 1 teaspoon vinegar, 5 to 6 drops thyme, lemongrass, or lemon essential oil and sponge the paste onto the microwave interior. Let it dry. Rinse well. Let the microwave air dry for about 10 minutes with the door open. To deodorize, combine 1 teaspoon vinegar, 10 drops of lemon essential oil and ½ cup water in a microwavable bowl. Cook this in the microwave on high for 2 minutes and wipe the interior of the microwave. This deodorizer gets rid of the smell of popcorn.

Useful oils in the head

To clean, kill germs, deodorize, and freshen, use these inexpensive antiseptics and bacteria-busters (some are also anti-fungal and anti-viral): cinnamon, clove, eucalyptus, grapefruit, lavender, lemon, lime, pine, or thyme.

Wash surfaces with soap and water, then sprinkle a few drops of one of these essential oils on a damp cloth and wipe the surfaces to kill germs, inhibit bacterial growth, and deodorize.

For toilets: flush, pour 1 cup of vinegar in the toilet bowl, and sprinkle with baking soda. After 30 minutes, swish with the toilet bowl brush and flush.

For the shower, mix 1 cup baking soda, ¼ cup liquid soap, 1 tablespoon vinegar, ¼ cup water, and 4 drops of eucalyptus essential oil. Mix the soda and soap. Add water, stir; add the vinegar and eucalyptus oil. Store this in a spray bottle. Shake the mxture before spraying the shower interior, scrub with a cloth or brush, and rinse thoroughly.

A prop-er match

To avoid engine troubles, fit the right propeller

by Rebecca Burg

Rebecca Burg took the hands-on approach when matching a new prop to her boat's new engine.

The shark meandered toward my right foot. It was so close I could see brown spots on its nose. Loaded with tools and dive gear, I froze, not sure whether to laugh or slink away. The creature was barely more than a foot long. Still, a shark is a shark. The tiny interloper snooped around *Angel's* keel while I proceeded to remove her rudder in order to get at and remove her propeller. I was in the final tuning stages of matching the prop to the engine I'd newly installed in *Angel*, my 1978 Bayfield 29.

Although we sometimes don't think about what's hidden below the waterline, an auxiliary sailboat's drivetrain is worthy of serious consideration. In my case, I was ensuring that I fitted the correctly sized propeller that's crucial for long engine life and optimum performance.

Biggest is best

Most sailboats have been designed to accommodate a propeller of a particular diameter. As a consequence, the location and angle of the shaft and strut — as well as perhaps the rudder and skeg, and even the shape of the hull — will impose a practical limitation on the maximum diameter of propeller that can be used. For the propeller to operate efficiently, minimum clearances must be maintained between the blades and the hull, skeg, and rudder:

- ***prop to hull:*** 15 to 20 percent of prop diameter, to give the least noise and vibration and 8 percent of prop diameter as the absolute minimum;
- ***prop to rudder:*** 15 percent of prop diameter;
- ***prop to skeg:*** 30 percent of prop diameter.

Ideally, the engine should reach 90 percent of its rated rpm under load with the propeller. A prop that's too large will overload the engine, preventing it from reaching its rated rpm while it emits smoky, black exhaust. A prop that's too small will allow the engine to race beyond its rated rpm while failing to propel the vessel at its hull speed. Either condition will reduce engine life and can create needless complications down the road.

Taking all of this into account, you want to select the largest diameter prop that you can and adjust the pitch to match it to the engine.

Matching prop to boat

If you repower your vessel, you'll have to play the drivetrain-matching game. You might also need to follow the same steps if you purchase a used auxiliary

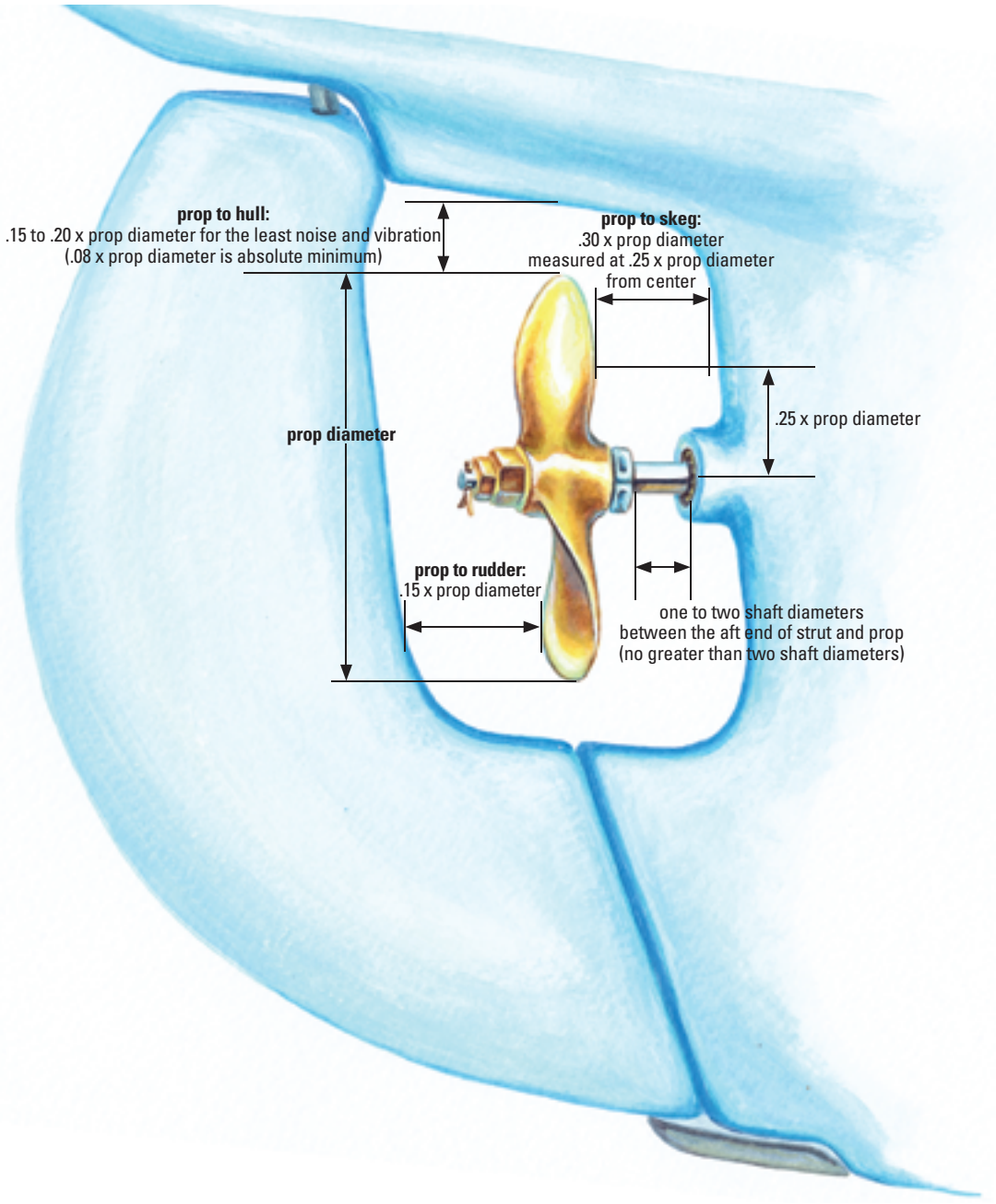
sailboat and wish to optimize her for your needs or assure that the existing prop is the correct one.

If your boat was designed for an Atomic 4 engine, there is a good chance the transmission was 1:1 in forward gear. In other words, there is no reduction ratio. Such an installation was intended to use about half of the maximum rpm and horsepower that the Atomic 4 could produce. Because the prop shaft turned very rapidly, it was fitted with a very small-diameter prop. If you repower with a diesel, you will find that the engine comes with a marine gear that gives about 2:1 reduction in forward gear. Because the prop is turning much more slowly, the new engine will need a much larger propeller. Installations of this nature often require significant compromises to be made because the boat's design does not provide enough room for the larger propeller.

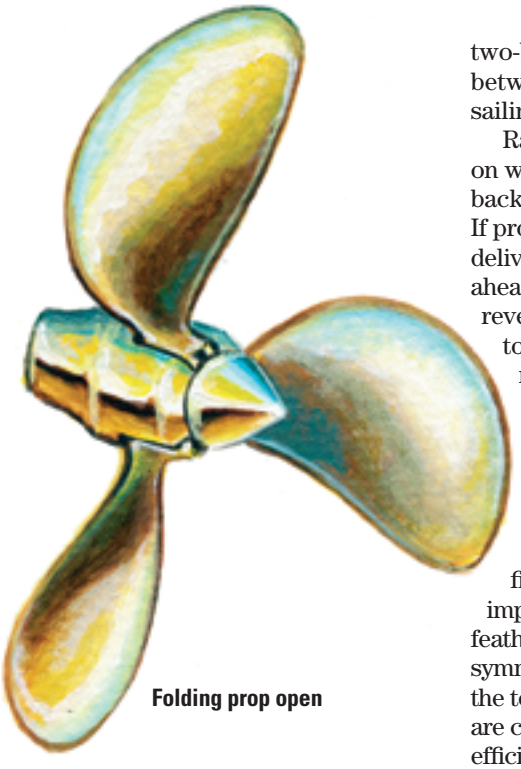
"Along with being an appropriate match in terms of size and pitch, a propeller should be suited to a vessel's specific uses."

Matching prop to purpose

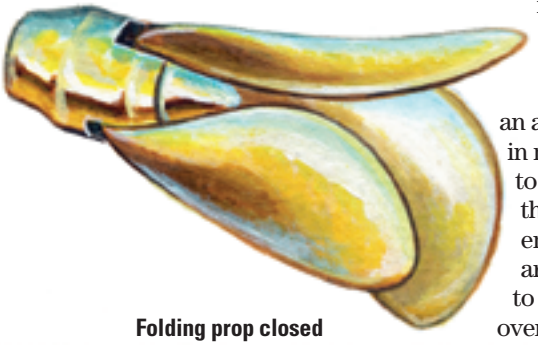
Along with being an appropriate match in terms of size and pitch, a propeller should be suited to a vessel's specific uses. Cruisers on a schedule appreciate the efficient motoring that a three-bladed prop can provide. Sailors mostly engaged in racing prefer a two-bladed prop for its lower drag. A fixed



ILLUSTRATIONS BY REBECCA BURG



Folding prop open



Folding prop closed

two-bladed prop is a good compromise between motoring efficiency and sailing speed.

Racers often choose a folding prop, on which water flow pushes the blades back in line with the shaft when sailing. If properly sized, a folding prop can deliver good thrust when motoring ahead, but it doesn't have good thrust in reverse. When reversing, it's necessary to use very high engine speeds to make a folding prop bite.

The blades on feathering props, rather than folding, rotate to align with the water flow. This does not reduce drag as much as folding, but feathering props do have significantly less drag than fixed props and offer a noticeable improvement in sailing speed. Many feathering props have blades with symmetrical cross sections — both the top and bottom surfaces of the foil are curved. This creates a small loss in efficiency when powering forward but they have noticeably more thrust in reverse than a fixed prop, which uses asymmetrical blades and is optimized for powering forward.

Feathering props usually have an adjustable pitch feature, although, in most cases, making adjustments to the pitch requires removal of the prop. The Autoprop design employs two or three blades that are self-pitching, allowing the prop to maintain a high level of efficiency over a wider range of speeds and loads. The Autoprop also has more thrust in reverse than comparable fixed or folding props.

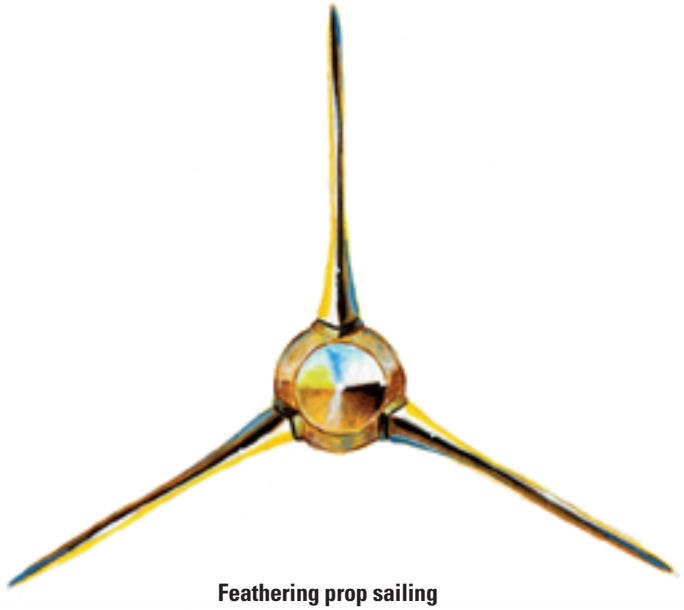
Drag on both folding and feathering propellers is less than on fixed-blade models, but a feathering prop can work better in reverse than a fixed-blade prop while a folding prop will not function as well.

While researching the correct prop size and type for your vessel, you will also find that different shapes and styles of blade are available.

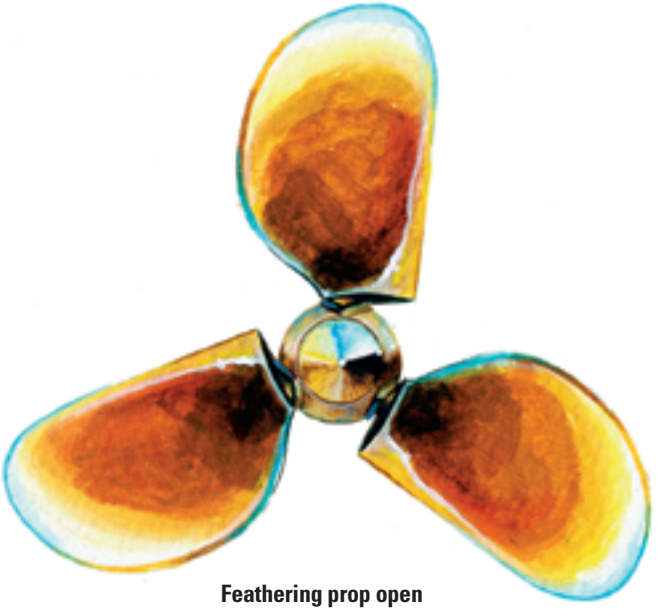
The choice between fixed-blade or folding and feathering propellers is up to the individual and his or her budget. For me and for *Angel*, a full-keeled cruiser which rarely races and operates in a variety of locations and weather conditions, the rugged simplicity of a fixed, three-bladed propeller was the most suitable.

Art, science, and guesswork

Sizing a prop to a particular boat and engine takes art, science, and generous amounts of educated guesswork. When I installed a 20-hp inboard diesel engine in *Angel*, I had to fit a new propeller. The prop distributor used a computer program to narrow the broad range of sizes and styles available. The program calculated a size based on detailed data about the boat and engine. I also sought the input of an experienced marine-diesel mechanic. Aided by the computer's results and the mechanic's worthy advice, I made a choice.



Feathering prop sailing



Feathering prop open

A propeller's characteristics are typically stamped on the hub. The diameter is marked first, followed by the pitch size and whether it's right- or left-handed. *Angel's* new model, marked 13 x 14 RH, indicated that the prop was 13 inches in diameter and had a 14-inch pitch. Pitch is the distance that the propeller, in the absence of slip, would screw itself forward through the water in one revolution. The "RH," meaning right-handed (or clockwise when looking at the prop from behind the boat), is the direction it will turn to move the boat forward.

After repowering, I installed the brand-new prop when *Angel* was still in the yard. A piece of wood wedged between the prop and the hull kept the shaft from rotating while I tightened the nuts. A soft rag between the wooden wedge and the hull protected *Angel's* freshly applied bottom paint.

Opinions differ on which of the two nuts goes on first: the thick one or the thin jam nut. One do-it-yourself book suggested putting the thinner nut on first. The commercial captains and staff working in the boatyard prefer to install the thick nut first. Over the years, I noticed that either method works as long as the nuts are well tightened and the cotter pin is securely in place.

Prop-er care

- Keep your boat's propeller clean. Even the slightest sea growth reduces efficiency and overloads the engine.
- Avoid applying copper-based bottom paint directly to the bare metal of a bronze-alloy prop. Use the appropriate primer first.
- The option of a polished or a satin finish on the blades makes no difference in the prop's performance, but a polished surface is easier to clean and marine organisms have a harder time adhering to it.
- Pink or rusty brown spots on a bronze-alloy prop are a sign of electrolysis and weakening of the metal. This typically results from a failure to change the zincs or when the prop has been bottom painted without a primer.

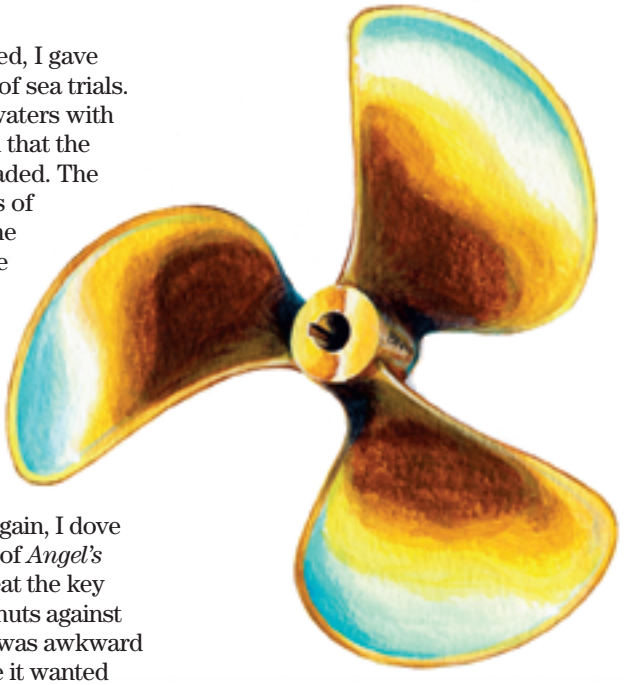
After *Angel* was launched, I gave the new propeller a series of sea trials. Motoring around in calm waters with a clean bottom, I could tell that the engine was slightly overloaded. The exhaust showed faint puffs of telltale black smoke and the laboring engine was unable to reach 90-percent of its rated rpm. I consulted a mechanic, who confirmed that a reduction in pitch was needed.

The shop repitched *Angel's* propeller, and 13 x 13 RH was now stamped on its hub. Once again, I dove and attached this new part of *Angel's* anatomy, making sure to seat the key before tightening the prop nuts against the wooden wedge, which was awkward to use under water because it wanted to float away. I kept spare cotter pins on hand in case I dropped one — I did, of course. The juvenile, freckle-faced shark returned to supervise the operation.

Perfect pitch

After this dive, a second test run showed a remarkable difference in *Angel's* performance. The exhaust was clear as the diesel smoothly revved close to its rated rpm without overspeeding or overloading in a variety of sea conditions. The match was a good one.

Several years of cruising and 600 engine hours later, *Angel's* propeller is still performing like a charm. Sailors do prefer to use the wind over fossil fuels, but the engine is a practical tool when we're faced with tight schedules, crowded harbors, or narrow canals.



Fixed prop

Given all the variables involved, I recommend you obtain professional advice in getting the most performance out of your auxiliary sailboat's drivetrain. A properly matched prop helps to keep the engine running smoothly and to prevent needless repairs down the road. That makes it an invaluable part of a sound cruising vessel.

Rebecca Burg comes from a long line of fishermen, mariners, and coastal dwellers. An artist and writer, she singlehands and lives aboard her Bayfield 29 but never far from the Morgan Out Island singlehanded by Bill Robinson. Visit her website at <http://www.artoffshore.com>.

An integral water tank

Food-safe epoxy makes potable possible

by Les Rogers

At the end of a two-year search for a fixer-upper cruising boat, I acquired a Pearson Vanguard, hull #142 built in 1964. I found her in a boatyard in Cocoa, Florida. The previous owner said she had been out of the water for five years; yard workers said she had been there for more than 10 years. One thing for sure was that the cockpit scuppers had clogged with leaves, and accumulated rainwater had flooded the cabin. There was evidence that water had stood as deep as 18 inches *above* the sole, but the black and greasy water was just below the sole when I first went into the boat.

The old tank removed, the bilge awaits a cleanup and a new role.

The old Monel metal water tank was shot. It was covered with oil and grime, and there were several holes along the bottom edges. Two of the rivets securing baffles had popped loose, allowing water to flow freely out of the tank. Who knows how much oil had made its way into it? The boat was going to need a new water tank.

Bidding the old monel tank farewell.

I looked into having a tank made of medium-density polyethylene (MDP). I contacted an owner of a sister ship who had an MDP tank. His tank cost him a couple of hundred dollars, but that had been several years earlier. I contacted the tank manufacturer to ask. They needed scale drawings, which I faxed to them. The company's quote for a new MDP tank was more than $600. I shifted my research for freshwater containment methods to a DIY solution.

Asked questions

I investigated integral fiberglass tanks, asking questions of local boatbuilders and owners of other Vanguards. With each discussion, I acquired bits of useful advice. The most important thing I learned during the inquiries was that one should not use ordinary epoxy resin to build a tank that will contain potable water. Further investigation revealed Oceaneering Research & Development in Pinellas Park, Florida. They were able to provide the necessary food-safe epoxies (Newlander Armor Products) to build and coat the new tank. I needed two different resins, one for building parts and the other for coating everything once it was all together.

Due to the quantity of rotten wood in the cabin, my plan was to completely remodel the saloon. I removed all the old furniture as well as the entire cabin sole. This provided lots of space in which to work.

Before beginning any construction, I sandblasted the inside of the hull and bilge area. In order to lay out the tank, I first marked in the bilge the locations for the bulkheads that would form the forward and aft ends of the tank. I then divided the tank area in thirds and marked the positions for the two baffles.

Before removing it, I had marked the outline of the old sole and used this mark to establish level. I ran strings from the outline on one side of the hull to the other above the marks where the bulkheads and baffles would be placed. I measured down from the level of the sole 4 inches and placed marks under the strings at that point. I used these marks to establish the top of the tank and the actual placement of its forward and aft bulkheads and the baffles, for which I then constructed cardboard templates, drawing rough shapes and sizes and trimming them to fit with scissors. This worked very well. When made to these templates, the bulkheads and baffles required very little trimming.

Marking out for the bulkheads and baffles.

Making the pieces

After fitting the templates, I started construction of the tank parts. I used a ¼-inch thick sheet of fiberglass left over from a different project. It was just

Making cardboard templates.

Checking the fit of the bulkheads and baffles.

Glassing in the forward and aft bulkheads.

Drawing out the aft bulkhead.

Laying up the half-pipe drain tunnel.

Incorporating the drain tunnel.

large enough to serve as the tank's aft bulkhead. I only had to cover its inside face with fiberglass mat wetted out with the food-safe building resin. For the forward bulkhead and the baffles, I drew an outline of each template on waxed paper laid out on a flat surface. To construct them, I laid up a sandwich of two layers of heavy biaxial cloth between two layers of fiberglass mat, using the building resin.

When the parts had cured, I trimmed them and took them inside the boat for a dry fit. Very little further adjustment was necessary.

Once I had made and fitted the new parts of the tank, I turned my focus to finding a way to drain any water that collected in the bilge area in front of the tank to the bilge space behind the tank. I constructed a half pipe, using 10-ounce cloth and epoxy, to create a tunnel beneath the tank. I waxed a 6-foot length of 2-inch PVC pipe and wetted out and laid glass cloth around it. Once it was cured, I removed the half pipe from the PVC mold, took it to the boat, and fit it to run down the center of the bilge under the tank. I needed to make a couple of relief cuts to get the pipe to conform to the shape of the bilge. I cut out semicircles at the bottom of the forward and aft tank bulkheads that would allow the drain to pass through them. Then I glassed in the bulkheads and drain tunnel, using the building resin. I tabbed the baffles in with 10-ounce cloth and the building resin.

A smooth and cleanable surface

Once I had glassed all the parts in place using the building resin, I covered the sides and bottom of the tank with fiberglass mat and the building resin. The texture left by the mat looked like it would provide too many places for biology experiments to get started, so I used a disc angle sander and 80-grit sandpaper to smooth it out. At this point, the tank and parts (bulkheads and baffles) were ready for application of the coating resin. I applied two coats using a foam roller. Coupled with the sanding, this

Glassing in the baffles.

Coating the sides and bottom of the tank.

Testing for watertight integrity.

produced a smooth interior surface that will be easy to clean.

Before closing in the tank, I wanted to make sure that it could hold the weight of the water. I ran a garden hose into the boat and "filled 'er up." I let the water stand in the tank all night and half of the next day. No leaks. I siphoned the water out and wiped the tank clean. I could begin to see the light at the end of this project's tunnel.

A tank has to be covered, of course. I made a template for this using a modified tick stick method. I laid two ¼-inch by 1½-inch battens (a 2 x 4 stud ripped on the table saw) parallel to each other running the length of the tank and resting on top of the bulkheads and baffles. I marked their positions and clamped them in place. I then hot-glued short battens across the two parallels so the ends of each batten just contacted the hull. I placed this series of short battens across the parallels the full length of the tank.

Connected the dots

Once all the battens were in place and the glue had cured, I lifted the web of battens off the tank, removed it from the boat, and laid it on a piece of ¼-inch marine plywood. I marked the plywood at each corner and at the end of each short batten. When I connected the dots, I had the outline of the top of the tank. Using a jigsaw, I cut the top out at a 45-degree bevel and took it into the cabin to do a dry fit. I had to file spots at the edges so the top would sit flat on the bulkheads and baffles while touching the hull along its edges. Once I was satisfied with the fit, I covered the underside of the lid with mat and building resin, followed by a sanding and two coats of the coating resin.

Before tabbing the top in place, I doubled its thickness at the aft end with a narrow piece of ¼-inch marine plywood. This reinforced area would serve as a location for plumbing. I used a Forstner bit to recess the tops of the plumbing bushings. Then I drilled holes to accept the plumbing and, before permanently installing the top, cut inspection ports into it.

I attached the top to the tank in two steps. First, I laid down a bead of coating resin thickened with Cabosil

Making the template for the tank top.

Creating a base for the plumbing fittings.

Cutting inspection ports.

Tidying up with a final coat of resin.

where the edge of the top contacted the hull. I laid the top in place and then tabbed it to the hull with two layers of biaxial cloth wetted out with building resin. Once it was tabbed in place, I coated the entire top with the building resin just to tidy up its appearance.

To some, constructing this integral water tank may seem a daunting task, but actually none of the steps involved were difficult. I was relatively new to fiberglass work at the time, and the project gave me an opportunity to develop skills working with fiberglass and different types of resins.

I'm glad I decided to build a water tank in my boat and I look forward to many years of use.

Les Rogers has been a science and math teacher and football coach for 22 years. He loves sailing, and he rebuilt the Vanguard, his first boat, with his own hands so he would know it inside and out. Les and his wife, Lourdes, plan to use the boat for cruising in the summers and as a traveling home after retirement.

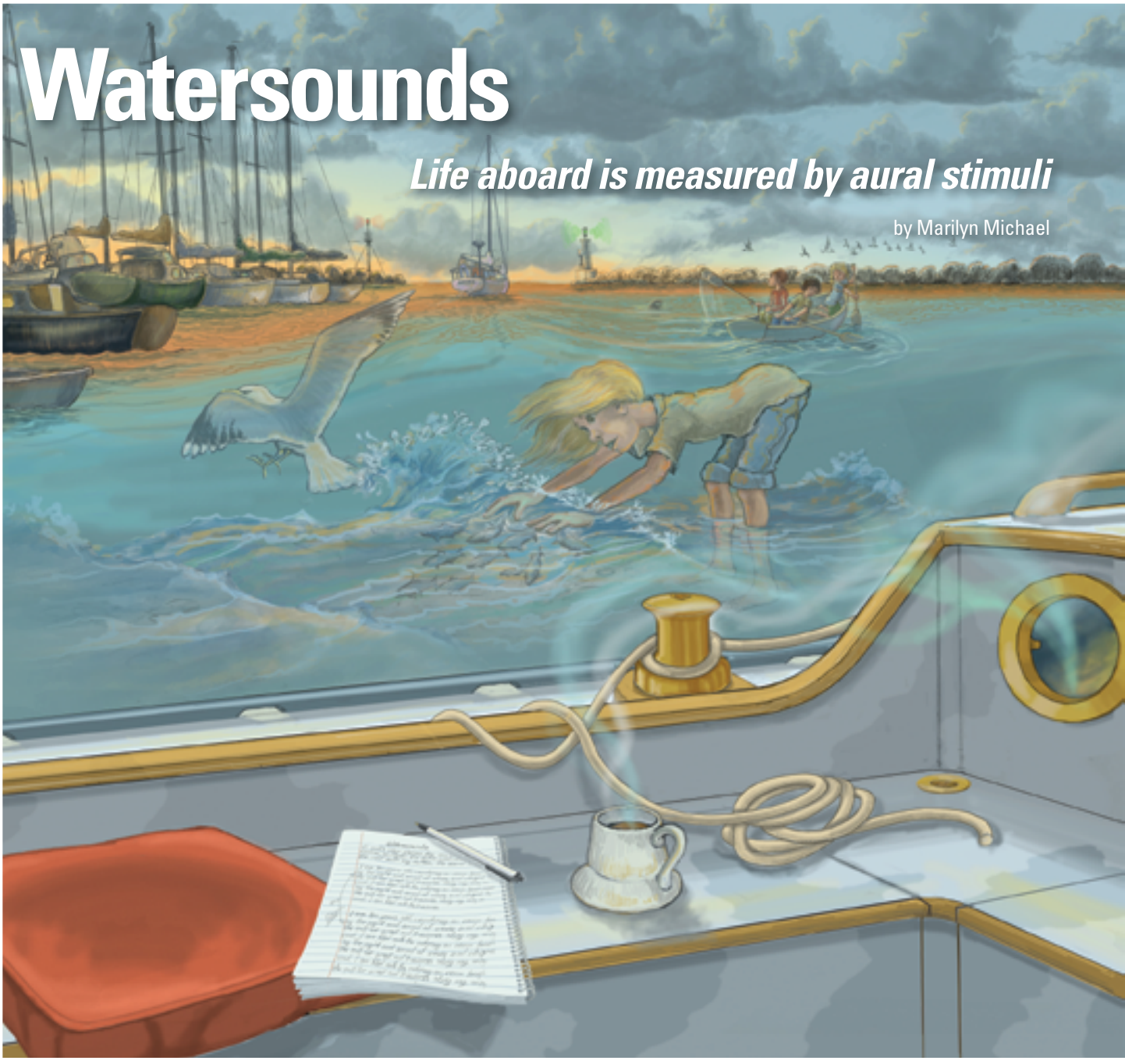
Resources

Food-safe epoxies:
Newlander Armor Products
Oceaneering Research & Development
5572 54th Way N
St. Petersburg, FL 33709; 727-544-3303
<http://www.armorpools.com>

Watersounds

Life aboard is measured by aural stimuli

by Marilyn Michael



A gull's cry pierces the morning quiet of the marina as I open the hatch and emerge into the mist with my coffee. That sound bridges time . . .

I am 10 years old, wandering an ocean beach, awed by the sight and sound of waves and intrigued by the salt-air smell and treasures along my way in the sand. I am filled with the thrill of discovery in a place so different from the wheat fields of my home. The seagulls' cries seem a haunting call and imprint on my mind this wondrous world of salt water and sea life. An intense and secret dream is born: to return and live life near the water.

Stretching out on the cockpit cushions, watching the steam rise from my coffee in the cool morning air, I wonder: is there truth in the wisdom of philosophers who say that what we ardently believe will inevitably come to pass?

Giggling, three little girls in a dinghy row by with an irregular, splashing rhythm of oars. They clumsily ply a course around the beautiful cove at the marina's edge . . .

Growing up inland, I had never set foot on more than a rowboat before my husband and I went in search of adventure. It's funny, though. The thought that we might dislike the boating life never entered our minds. When we stepped onto the deck of our newly-purchased sloop with all of its challenges, we had only thoughts of loving it.

The clang of a halyard diverts my attention . . .
In the storms of winter a marina becomes a giant wind chime. Wind whistling through masts and lines creates an ominous howling. It's a romantic, wintery sound to those in love with living on the water, the winter storm of poets.

Making a home on the water is not a passive way of living. Here, one is a participant in the passage of seasons. The birds, sunsets, ripples of water, the sounds of wind and rain — all make me feel like I'm part of a beautiful painting come to life. Hours can slip by while I enjoy the antics of birds and seals. I understand better than ever before that I am part of nature, not separate from it. I now appreciate the concerns of those devoted to preserving this wondrous world.

Sounds of my husband puttering in the galley mixed with strains of mellow jazz emerge from below . . .
The peacefulness of life aboard allows creativity to emerge. He loves to cook, and seems inspired in the nautical environment. For me it's the urge to write. Thoughts and ideas dwell within us all that, too often, stay submerged in the frantic bombardment of the daily routine. Sitting cross-legged on deck, refinishing wood on a sunny day, takes me far away from commuter traffic and from work in a driven, impersonal world. Looking out over the marina on a winter's day, the vision of snow-covered boats resting on steel-gray water set against billowy clouds — it's a world I want to share.

A pounding hammer draws my attention . . .
Always, people are hard at work on boats. Some are craftsmen sanding a fine finish to beautiful wood, others are "jury-rigging," otherwise known as creatively solving a problem. Someone may be hunting the origin of a leak or trying to get the varnish on before the cool of evening. I brought little skill to the task of refitting a boat, but I have discovered that enthusiasm and motivation often more than compensate.

Our love of the boating life grew as we made the transition to life on the water. A boat will not be molded and shaped to fit all the dimensions of life on land. We must have maturity enough to let the new environment reshape the style of living. In unexpected ways I've gained perspective about myself and life. Sitting on the dock mixing resins one day, I experienced pleasant memories of learning to follow my first recipe as a young girl. Creativity emerges in solutions found for challenges unique to living on the water. Tracing a leak and repairing it produced a better feeling than I ever received from self-improvement classes. The boating life stretches the mind and stimulates the imagination.

The boat beside me creaks and moans, pulling against its lines . . .
I've come to admire those who resurrect older wooden boats. These vessels, survivors of a passing era, deserve to be appreciated and cared for, not shunted aside. Some people understand this and spend many devoted hours working to preserve the life of these lovely creations. How gratifying to see a sad old boat perk up.

Laughter erupts down the dock . . .
It's a sound heard often here. Mostly it's good people meeting other good people, chuckling at strange solutions offered while congregating to solve a neighbor's problem, or lounging on deck in early evenings, laughing at oft-told adventures.

Off in the distance a motor sputters and finally starts as a neighbor prepares to cast off . . .
This is the perfect life for one who longs for something different, feels bored, or wants a challenge. The constant here is change — expecting people to come and go. Ever present is the option of having a change of scene for a day or forever. Some time ago, an older couple who had lovingly built their boat did what most only wish for: they sailed off into the sunset. Finally escaping to the life of their dreams, they're now at anchor in the Mexican sun. Though not in perfect health, they have left a major cause, the stress, behind. They didn't let lack of either youth or good health stop them.

Another gull cries out, setting off a cacophony of noise . . .
Sometimes they erupt as though one in their midst had discovered something important, and the others join in the excitement.

The three little girls have completed a jagged circle around the cove. Their course has become a little more accurate with oar practice. Listening to their splashes and giggles, I hope they remember the sounds of this peaceful moment. Maybe some day it will draw them back to this wonderful life, as memory of the sounds of the gulls drew back that little girl who walked along an ocean beach so many years ago.

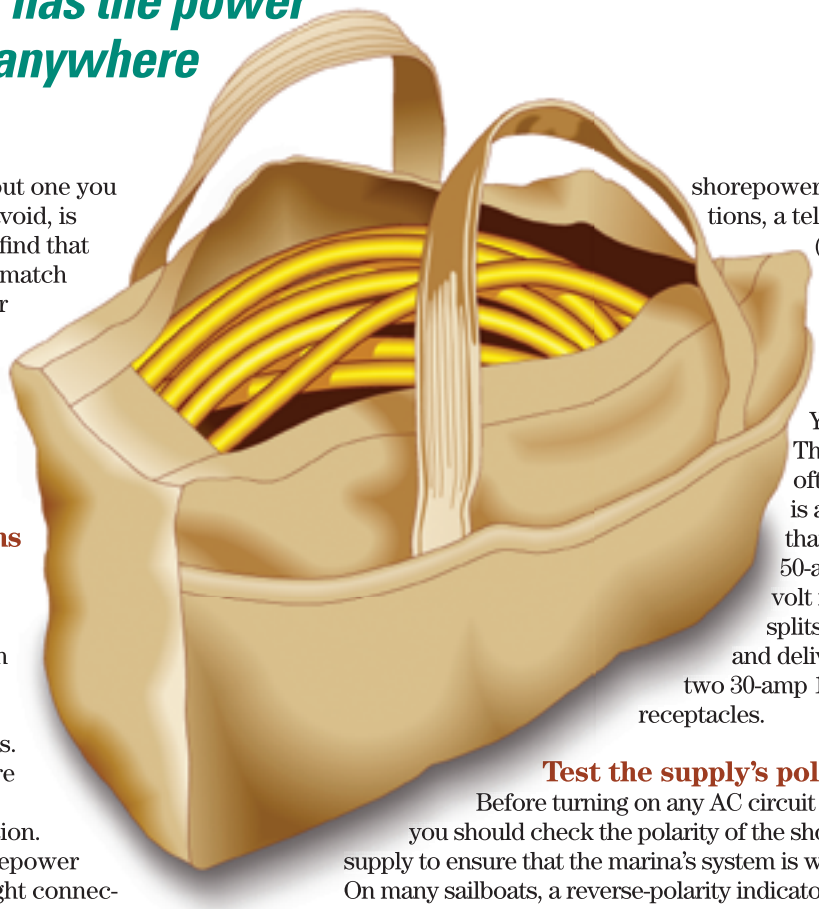
Marilyn Michael *is a psychotherapist and author of* The Snyder Michael Method: A Neurotherapeutic Approach. *She has lived aboard for 20 years in view of the Space Needle in Seattle, Washington. She shares her life with a husband who does all the cooking and writes a humorous food column for boaters.*

ILLUSTRATIONS BY FRITZ SEEGERS

Shorepower Adapters 101

A "bag of tricks" has the power to connect you, anywhere

by Don Launer



Cruising is full of surprises, but one you don't need, and can easily avoid, is arriving in a strange marina to find that your shorepower cord doesn't match any of the marina's shorepower receptacles. The answer is to put together a "bag of tricks" so, wherever you go, you can literally pull an adapter to solve any connection puzzle "out of the bag."

Voltage and power options

- Many small sailboats have a simple 15-amp system. This requires little more than a 15-amp 125-volt AC extension cord, similar to an extension cord used in the home but made to marine specifications.
- Mid-sized sailboats, with more AC appliances, use a 30-amp 125-volt shorepower connection. Threaded collars on the shorepower cord provide secure, watertight connections between the shorepower pedestal and the boat. This power is then distributed through the boat by wiring called branch circuits.
- Larger yachts that have one or more air-conditioning units as well as refrigeration need a 50-amp 125-volt system to deliver the high currents those appliances draw.
- Yachts that have large appliances such as electric ranges and clothes dryers need a 50-amp 125/250-volt supply. The matching power cord contains four conductors: the white neutral, the green ground, and red and black conductors that each carry 125 volts.
- Marinas that cater to very large yachts will also provide 100-amp 125/250-volt connections.

The shorepower bag

For safety reasons, each of these systems uses different connectors specifically designed so they cannot be used interchangeably. Thus, if the marina's electrical system is not identical to your boat's electrical system, to plug into shorepower, you will need an adapter.

The prudent cruiser's shorepower bag will contain all the accessories needed to get plugged in at any marina. Along with the shorepower cord, you will want adapters that will connect it into any of the four common shorepower configurations, a telephone cord (unless you use a cell phone), and a cable-TV cord.

Adapters also come in a Y-configuration. The one most often needed is a Y-adapter that plugs into a 50-amp 125/250-volt receptacle, splits the supply, and delivers it to two 30-amp 125-volt receptacles.

Test the supply's polarity

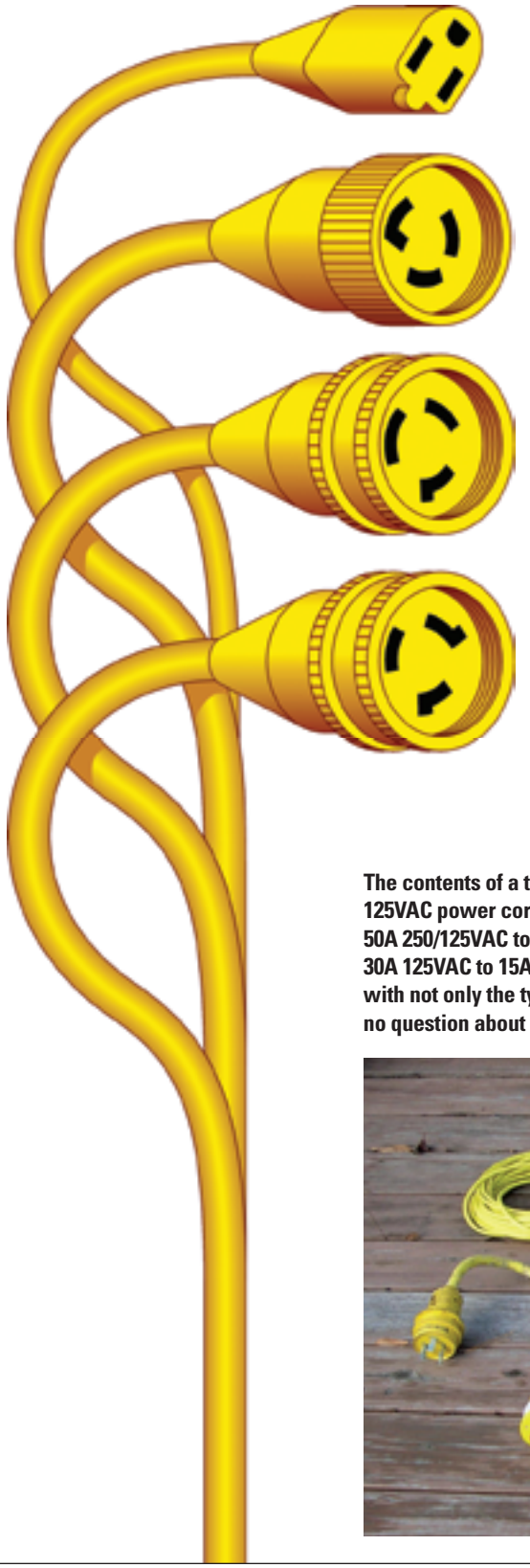
Before turning on any AC circuit in the boat, you should check the polarity of the shorepower supply to ensure that the marina's system is wired correctly. On many sailboats, a reverse-polarity indicator is built into the electrical control panel. To use this indicator, first turn off your main power switch or circuit breaker, then connect your shorepower cable. If your indicator gives the shorepower a clean bill of health, you can turn on the main switch. If it indicates reverse polarity, unplug the shorepower cable and alert the marina's management to the problem.

> "I couldn't believe my eyes. The hot wire was connected to the ground terminal and vice versa."

If you have no built-in reverse-polarity indicator, purchase a plug-in type and add it to your shorepower bag. Before you plug in your cord, check the system by plugging the indicator directly into the dockside power pedestal, using an adapter if necessary.

I always check polarity at a marina or yacht club before connecting my shorepower cable. It's a routine. I never expect any problems and had one only once. I took a slip

LAYOUT AND ILLUSTRATIONS BY TED TOLLEFSON



at a yacht club and plugged my polarity checker into the shorepower pedestal. I couldn't believe my eyes. The hot wire was connected to the ground terminal and vice versa — a potentially lethal wiring error. I checked the other outlets on the docks and they were all fine. Mine was the only bad one. I notified the club, and the electrician was there in minutes.

Guard against corrosion

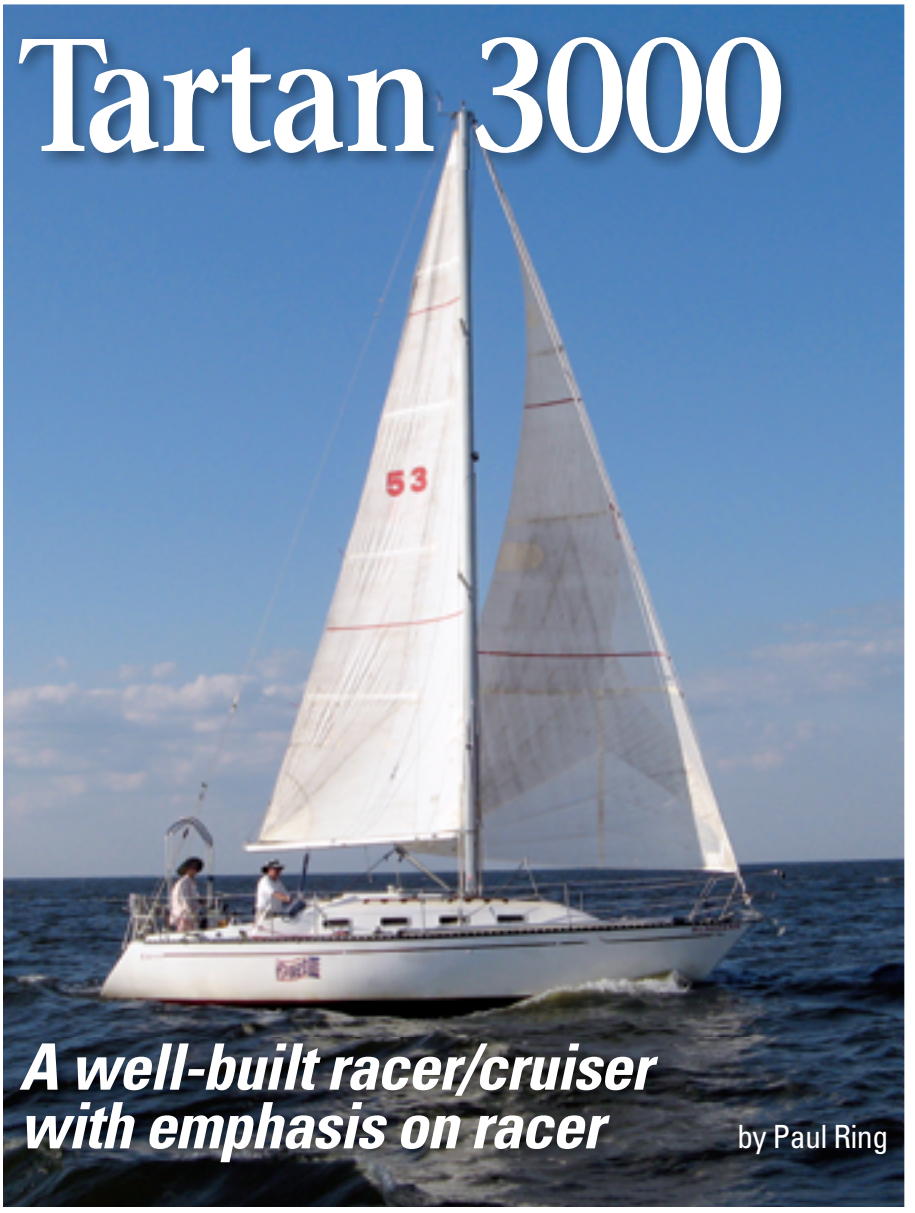
Loose, corroded, or leaking connections are the most common cause of shorepower problems, both at the dock's power pedestal and at your boat's power-input socket. Corrosion, often the result of a non-waterproof connection, causes resistance, and resistance creates heat. This not only leads to a fire hazard, but also ends up destroying the plug on the shorepower cable and the socket on your boat or at the dock pedestal.

The terminals on a shorepower cable should be protected from moisture by vinyl covers and a sealing collar system. The covers protect the plug and connector and the collar system provides both protection from moisture and a mechanical seal between the cordset and the connector.

Don Launer, a Good Old Boat *contributing editor, has held a USCG captain's license for more than 20 years and has sailed the east coast from Canada to the Caribbean. He built his two-masted schooner,* Delphinus, *from a bare hull.*

The contents of a typical shorepower bag, from left to right. Top row: cable-TV cord, telephone cord, 30A 125VAC power cord. Middle row: 30A 125VAC to 15A 125VAC adapter, 50A 125VAC to 30A 125VAC adapter, 50A 250/125VAC to 30A 125VAC adapter. Bottom row: polarity checker, 15A 125VAC to 30A 125VAC adapter, 30A 125VAC to 15A 125VAC adapter, 20A 125VAC to 30A 125VAC adapter. It's a good idea to label the adapter with not only the type of socket it fits, but also with the name of your boat, so that on a marina dock there's no question about who owns the adapter.

Tartan 3000



A well-built racer/cruiser with emphasis on racer

by Paul Ring

***Duet III*, Bob Hasewinkle and Jeanne O'Connell's Tartan 3000, shows off lines that, even after 27 years, are still fresh looking.**

On August 29, 2005, Hurricane Katrina lifted *Duet II* out of her slip at the Fairhope (Alabama) Yacht Club, carried her across Bayou Volanta, and deposited her amid the jumble of sailboats on the north shore. Damage to her was so extensive the insurer considered her a total loss and paid off her owners, Bob Hasewinkle and his wife, Jeanne O'Connell.

Bob and Jeanne had used *Duet II*, a C&C 29, for racing and short cruises along the Gulf Coast and wanted to replace her with a boat of similar size and capabilities. After an appropriate grieving interval, and armed with their insurance check, they went shopping. They reviewed the various listings, talked to brokers, kicked keels, and eventually found their new boat conveniently close to home in Pensacola, Florida. *Duet III* is a Tartan 3000, built in 1984 by Tartan Marine of Fairport Harbor, Ohio. For more about Tartan Marine's history, see the November 2003 issue of *Good Old Boat*.

Design

Tartan Marine introduced the Tartan 30, designed by Sparkman & Stephens, in 1971, and its popularity helped establish the relatively new company. Ten years later, when it became time to replace the aging 30, the company commissioned S&S to design its successor, the Tartan 3000. According to company literature, the Tartan 3000 is faster and easier to sail, has more sail area than the original 30, is drier on a beat, has fuller sections aft to induce surfing on wave faces, and is more comfortable on deck and below. It is moderately light, and has a relatively low displacement/LWL ratio of 217.

The fin keel/spade rudder design was offered in two versions. To optimize lift when sailing to weather, the standard keel is based on a NACA foil section and draws 5 feet 2 inches. For those sailing in thinner water, a 4-foot 1-inch Scheel keel was available.

Tartan offered three versions of the 3000 and each could be purchased with either keel option. The cruise model featured wheel steering, hot and cold pressure water, a stove with an oven, and a bow roller for the anchor. The race model emphasized performance with tiller steering, a bendy double-spreader rig, cockpit-led halyards, a spinnaker package with extra winches, and a folding propeller. The custom model allowed the buyer to combine preferences from columns A and B of the menu.

Although introduced 28 years ago in 1981, the Tartan 3000 has a modern look with its flat sheer set off by the sharply raked bow and reverse transom. The beam is generous, tapering sharply to the bow to give a fine entry (the primary goal) but compromising interior volume in the forward third of the hull. The cabin trunk is long and low enough for good appearance while the fairly high freeboard provides ample volume for accommodations. Headroom is a reasonable 6 feet. All eight cabin portlights open, providing good cross ventilation.

Deck features

The cockpit is large enough for a racing crew, provided the "rail meat" doesn't fill it up when off the wind. The seats and seatbacks are comfortably contoured and 80 inches long, making sleeping under the stars possible. Although the arched helmsman's seat provides good visibility, it is too sharply rounded for comfort without a cushion. The cockpit's modified T-shape makes

it possible to get around the wheel without climbing up on the seats — a good safety feature. *Duet III* has Lewmar 43 self-tailing primary winches and no secondary winches. Cockpit stowage is limited even though there are no quarter berths.

The starboard seat locker is mostly taken up by the longish icebox, leaving only the port seat locker for stowage. A hatch in the starboard seat permits easy loading of ice which, judging by the insulation thickness (or thinness), may be more a necessity than a convenience. A heavy-duty line-controlled traveler spans the bridge deck, providing effective mainsail control. Only two cockpit drains are fitted. They are a bit undersized, so the cockpit will drain slowly if the boat is pooped.

Wide sidedecks allow for safe crew movement. Access forward is further facilitated because the generous beam allows the shroud chainplates to be placed next to the cabin. This also creates a closer sheeting angle. The ventilation hatch for the forward cabin is mounted on the foredeck immediately forward of the cabin trunk. While it's not directly in the way of foredeck work, the crew must be aware of it, especially if it's covered by a doused sail. Good-sized track-mounted and multi-part line-controlled genoa cars make sheet lead adjustments possible while under load. The perforated aluminum toerail provides a multitude of attachment points.

Wide sidedecks and inboard chainplates make for easy movement fore and aft. The double lifelines and pulpits are a bonus.

Duet III has a keel-stepped, double-spreader mast supported by a forestay with roller furling, an adjustable backstay, single pairs of upper and lower shrouds, and an adjustable babystay. For a family boat, it has above average sail power as evidenced by its sail area/displacement ratio of 17.4. According to Tartan literature, mast and boom sizes and configurations varied according to model. A vang, which controls the rise of the boom when reaching and running, can also be used as a preventer by clipping its lower end to one of the toerail perforations. However, given its attachment point on the boom, an accidental jibe in a fresh breeze might buckle the boom.

Construction

The hull is hand-laid fiberglass, cored for rigidity and weight reduction. (Tartan literature doesn't specify the core material, but end-grain balsa has long been the industry standard.) The cored deck is bedded in butyl and polysulfide and mechanically fastened to the hull with ¼-inch stainless-steel bolts that go through the perforated toerail, then the deck, and finally the hull flange. A non-skid pattern is molded into horizontal surfaces. Double-rail bow and stern pulpits and double lifelines are more than you get on most boats this size. My examination of Bob and Jeanne's boat satisfied me that it is well and strongly built and without evidence of gelcoat cracks or crazing. The decks are solid and do

The bow has a fine entry. The ventilation hatch on the foredeck does not directly interfere with foredeck work, but the crew needs to be mindful of it, especially if the open hatch is covered by a doused sail.

The spacious cockpit has a modified T shape, making it possible to get around the wheel without stepping up on the seats — a good safety feature. The heavy-duty mainsheet traveler is mounted on the bridge deck.

The port settee, at left, extends to make a double berth. Above it is open-shelf and cabinet storage. The 40-gallon water tank is beneath. The navigation station, at right, located in the port quarter area, is well designed and large for a boat this size. The dining table, below, is good sized and folds in half for stowage vertically against the bulkhead when not in use.

not flex. Bob reports that there is no evidence of gelcoat blistering.

Instead of the usual bonded-in fiberglass headliner, a vinyl material is held in place with battens. This allows tabbing of the bulkheads to the deck, something not usually possible with fiberglass headliners. A couple of zippers provide access to overhead wiring. The cabinets and berths were built in place and tabbed to the hull with fiberglass and resin. This method gives much better access to the inside of the hull than does a molded fiberglass pan in the unfortunate event that repairs are ever needed.

Accommodations

Someone stepping through the companionway and down three steps will first notice a surprisingly large navigation station on the port side. The desktop lifts up to reveal chart stowage beneath and a roomy cabinet outboard of the table has room for bulkhead-mounted instruments and a radio. The electrical distribution panels also are mounted in this space, tucked away where they will stay dry.

Immediately opposite to starboard is a compact but reasonably well organized galley. The icebox, as previously mentioned, extends quite far under a cockpit seat. Items all the way back can be accessed only through the cockpit seat hatch. A vertical door provides access from the galley. The single-compartment sink is partially tucked under the cockpit, inhibiting access for the dishwashing crew. Counter space is limited. The galley stove was missing — a two-burner propane camping stove had been substituted when Bob and Jeanne purchased *Duet III*. Overall, galley storage is well-organized and adequate.

Forward of the galley and navigation station are port and starboard settees. The port settee converts to a double berth 75 inches long and 48 inches wide. Above it is an open shelf and a cabinet and beneath it a 40-gallon water tank. The opposite settee makes a single berth of the same length and about 33 inches wide. *Duet III's* previous owner built a cabinet on the forward third of this settee in which to house an air-conditioning unit. Consequently, the remainder of the berth is only long enough for a small child. Above this settee is an open shelf with fiddles.

The dining table is attached to and folds up against the bulkhead that separates the main cabin from the head. The table folds in half for storage but opens to a size wide enough to serve diners seated on both settees.

The head is located between the main cabin and the forward cabin and spans the width of the boat. The washbasin with stowage beneath is on the port side and the commode is on the starboard side with shelf storage above. There's a hand-held sprayer for showers. A small hanging locker is adjacent to the washbasin.

The forward cabin is a 75-inch-long V-berth, which is very narrow at the forward end. Bin storage and a 20-gallon holding tank are located beneath this berth. Bob and Jeanne use the V-berth primarily as a sail locker. Bob has rigged fiddles here to hold a 12-volt refrigerator/freezer chest that supplements the galley icebox.

Access to the Universal M-2-12 diesel engine is excellent. The entire front and part of the top of the engine compartment can be easily removed. All service points can then be reached except the transmission dipstick, for which a panel in the port seat locker must be removed. This panel also provides access to the stuffing box.

Performance

So I could evaluate the boat's sailing performance, Bob and Jeanne made me skipper for a day during one of our club's Sunday fun races. Leaving the harbor under power also gave me an opportunity to put the engine through its paces.

By today's standards, the 12-hp, 2-cylinder Universal diesel is a little undersized. However, at an easy 2,000 rpm, the easily driven hull made about

5.5 knots. Motoring into a chop would slow it down. There was a little more noise and vibration than I care for, some of which could probably be eliminated by careful alignment of the transmission and propeller shaft. The fin keel/spade rudder configuration makes it possible to steer in reverse once enough speed has been gained for the rudder to bite.

On the way out to the starting line, we were beam reaching. The boat felt good, and boat speed was fine; however, I found the steering to be a little twitchy. To stay on course, I had to pay constant attention to the helm. The loads were light, but tracking was reminiscent of driving a car aligned with insufficient toe-in.

It took me a few minutes into the windward leg to find the groove, but then I'm a Nonsuch owner who wonders why anyone has more than one sail. The wind was offshore and shifty at 8 to 10 knots. When I was carefully minding the jib telltales, we made about 5 to 5.2 knots. On this point of sail the boat tracked well with none of the wandering we experienced when beam reaching. The boat tacks smartly, accelerates well, and points quite high.

Our next leg was a broad reach. This was a non-spinnaker race, so we poled out the 145-percent genoa. On this point of sail, there was no evidence of the twitchiness we experienced on the beam reach. Our nemesis reached the weather mark ahead of us (due to the shortcomings of my learning curve and much to Jeanne's consternation). But little by little we gained on him. After a well-executed jibe by Bob and crew, we were on the next reaching leg of this triangular course and continuing to gain.

Upon rounding the next mark, we hardened up for the beat to the finish. By now, I had settled down a bit and carried out suggestions more skillfully; we finished handily in the lead.

This short race convinced me that Tartan Marine and S&S had placed the emphasis on performance when conceiving and building the Tartan 3000. It is a reasonably comfortable cruising boat, but it shines most brightly on the racecourse. Of course, the design is by now somewhat dated and other newer designs are faster but, when well-sailed, the 3000 can sail her PHRF rating, which averages about 174 in the Gulf Yachting Association. In other fleets, it rates as low as 162. For comparison, the high-performance J/30 rates 144, while the Catalina 30 rates between 180 and 192, depending on the fleet.

The galley is laid out reasonably well, given the limited space in a 30-foot boat, but the sink is partially tucked under the cockpit, which hampers leaning over it to work.

Conclusion

The Tartan 3000 is, in my opinion, a fun, good-looking racer/cruiser, with the emphasis on racer. Bob and Jeanne are happy with *Duet III* and find she's suited well to their sailing lifestyle of regular weekend racing in club fun races, frequent participation in Gulf Yachting Association-sanctioned regattas on Mobile Bay, and short cruises two or three times a year.

For those with cruising interests exclusively, other boats without the racing outfit of the Tartan 3000 are more suitable, perhaps even the cruising model of the Tartan 3000. However, the quality of the Tartan is considerably above average.

Anyone contemplating a purchase should look for problems common to most aging boats: leaks around portlights and deck hardware, soft decks, bottom blistering, and so forth. Additionally, the rig should be very carefully inspected; most rigging experts believe boats of this age are well past-due for replacement of wire and terminals.

Only 97 Tartan 3000s were built during its production run from 1981 to 1988. Therefore, not many can be found for sale. An Internet survey turned up only five, ranging in price from $19,900 for an '83 and $29,900 for an '84. The $10,000 difference presumably reflects more than a one-year difference in age. The average price of these five boats was a bit over $25,000.

Tartan 3000

Designer: Sparkman & Stephens
LOA: 29 feet 11½ inches
LWL: 25 feet 3 inches
Beam: 10 feet 1 inch
Draft (deep fin): 5 feet 2 inches
Draft (Scheel keel): 4 feet 1 inch
Displacement: 7,950 pounds
Ballast: 3,830 pounds
Sail area: 441 square feet
Disp./LWL ratio: 217
SA/Disp. ratio: 17.4
PHRF: 174
Water: 40 gallons
Fuel: 19 gallons
Holding tank: 20 gallons
Mast above DWL: 43 feet 4 inches
Engine: 12-hp Universal diesel

Paul Ring is a contributing editor with Good Old Boat. *He has sailed, repaired, modified, restored, and built boats for the past 42 years.* Magnolia, *his restored Cheoy Lee Offshore 27, graced the cover of Don Casey's book,* This Old Boat. *Paul currently sails his Nonsuch 260 with first mate, Barbara Brown, on Mobile Bay. He has written many how-to articles for sailing publications.*

Chainplate islands

An uplifting way to cure pesky deck leaks

by Don Casey

All the water that comes aboard our boat, whether from sea or sky, is supposed to drain off through scuppers in the sidedecks. Unfortunately, the scuppers are not the only holes there. Chainplates fastened to knees inside the cabin pass up through holes in the deck. Sealant is supposed to keep water from flowing below but, as everyone knows, the grip of sealant on the thin edge of fiberglass around the hole is temporary at best.

To me, this type of chainplate installation looks just like a pop-up bathtub drain, and functions about the same too. Mounting chainplates through holes in the lowest part of the deck has never struck me as award-winning engineering, but the fact that I have lived with this inanity for more than 30 years doesn't put me in the genius class either. Fortunately, I eventually met fellow Seawind owner, Bill Lynch, in Grenada. Bill had devised a solution: raise the hole above the deck. Duh.

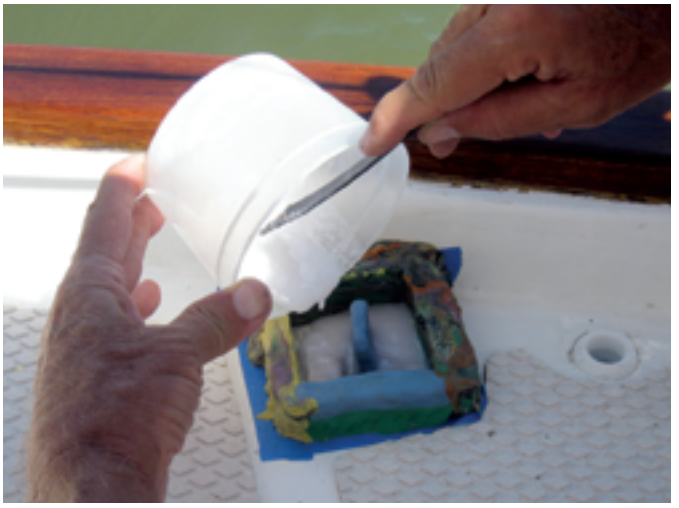
Bill fashioned spacers and bonded them to the deck. I felt there was still potential for water to eventually find its way under the spacers and opted instead to cast epoxy islands, confident that if I first ground the deck vigorously with 36-grit paper, the island and deck would essentially become one.

Blue tape and modeling clay

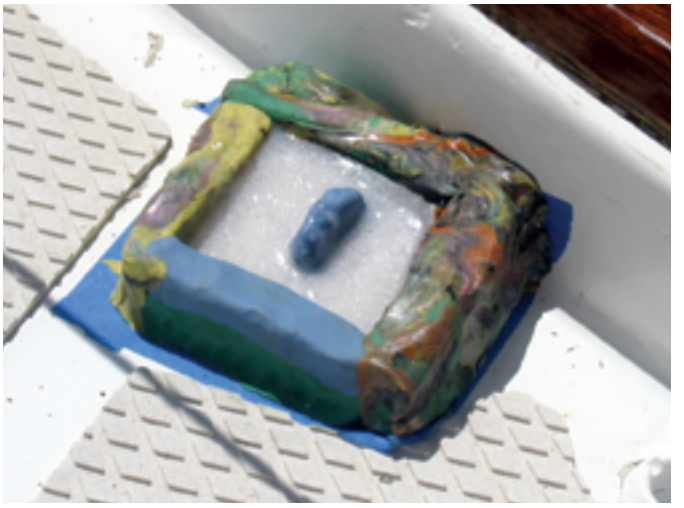
To get a truly permanent bond, carefully but thoroughly grind the deck around the chainplate. Outline the island with blue tape, then build the mold on the tape from kids' modeling clay. Be careful not to make the islands too tall, or you won't be able to pin the toggle to the chainplate.

Flush with the deck, a chainplate invites leaks.

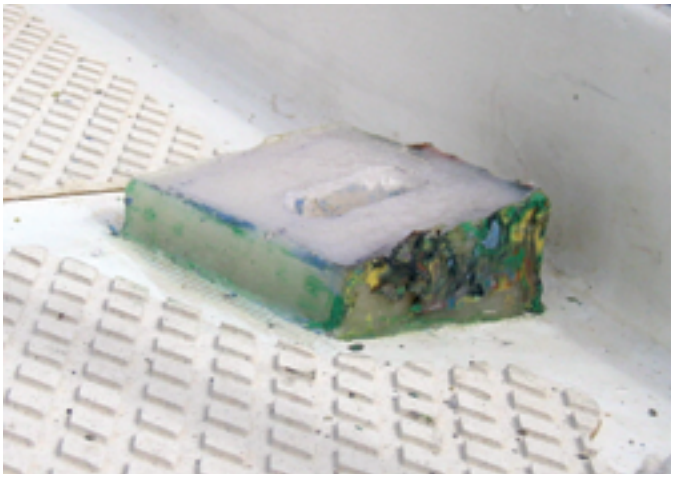
A mold of modeling clay defines the shape of an island of epoxy.



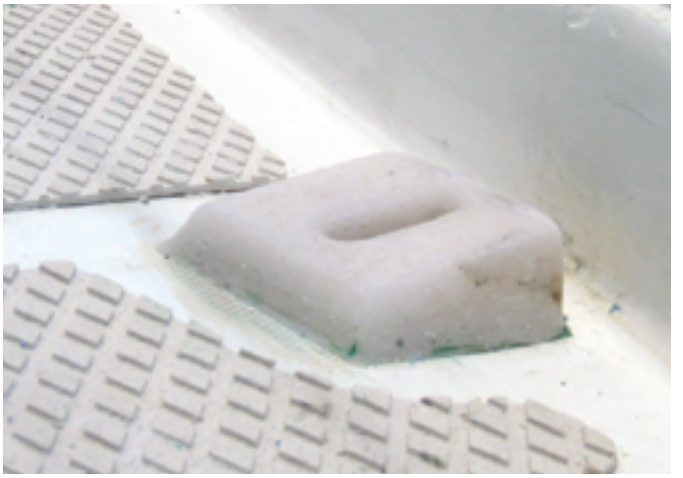
Epoxy thickened to a ketchup consistency flows just right.



The epoxy, poured in stages to avoid heat build-up, is allowed to cure.



Once the epoxy has cured, the mold can be removed.



Cleaned up and sanded, the island has become part of the deck.

A dry fit establishes that the island will meet expectations.

Once leak-prone, the chainplate is now high and dry.

I did one island at a time, re-using the same clay to cast six islands. If the clay is a dark color, shade it from the sun to keep it from going soft. Close the hole through the deck with tape. If you close it with clay, the heat from the curing epoxy will open it and the epoxy will drain below (don't ask me how I know this). A clay "chainplate" (sitting on top of the tape) lets you cast the hole rather than having to machine it. Make it slightly small and dress the hole to size with a rotary tool. Similarly, make the island slightly large and sand it to size and shape.

I used epoxy resin thickened with glass microfibers to a thick ketchup consistency which yielded ivory-like islands of admirable appearance and hardness. Do multiple pours so the heat generated by the curing epoxy doesn't soften the clay mold. I made three 1-ounce pours for each island, allowing each pour to gel before adding the next layer.

Let the epoxy cure at least 24 hours before sanding it to the final shape. When you reinstall the chainplates, you will happily discover that chainplate islands create a bonding surface for the sealant as wide as the island is tall, a vast improvement over deck thickness. Pump sealant around the chainplate, install the cover plates, reattach the rig, and your chainplate leaks will be a thing of the past. Paint the exposed epoxy to match the deck and to protect the UV-sensitive resin.

Don't drop your guard

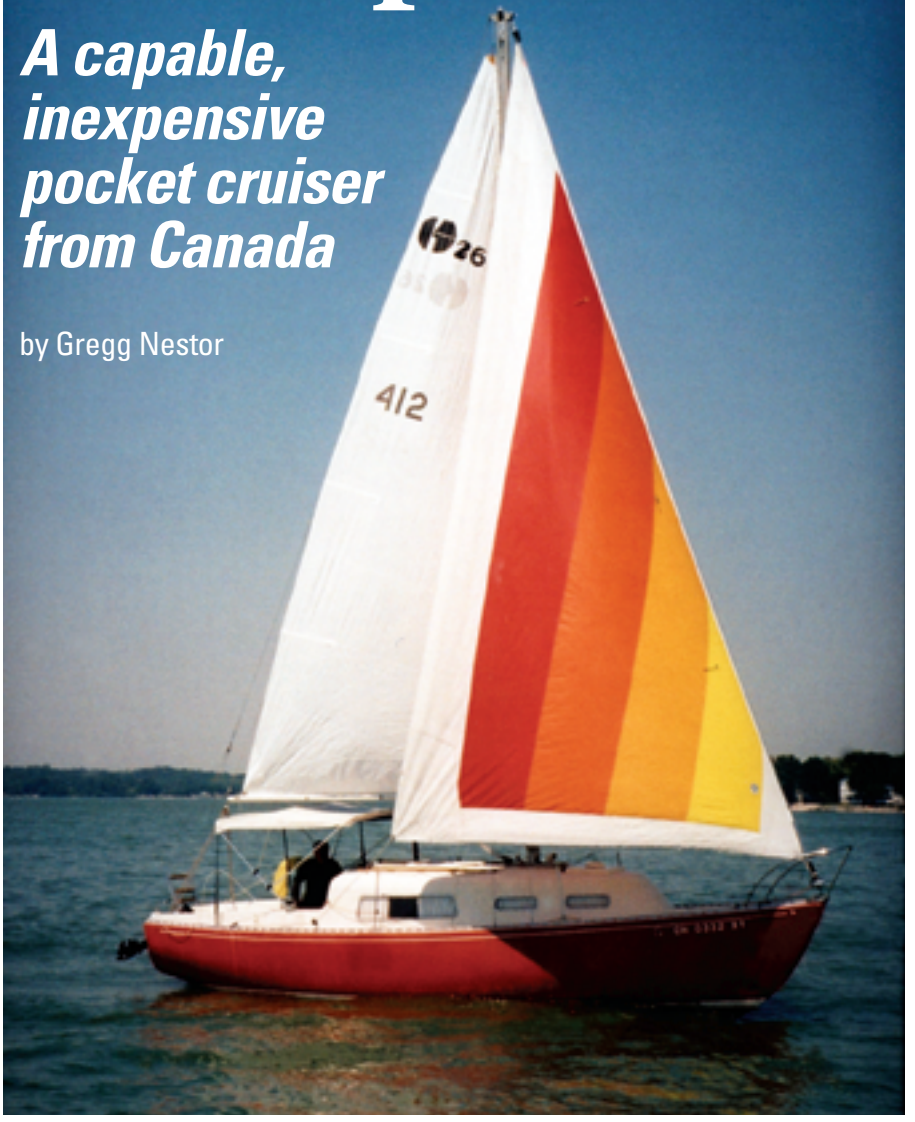
There is a downside to this improvement. Chainplates that fail to *demand* attention probably won't get any — a risky oversight for stainless-steel hardware. Every few years, remember to pull your chainplates — no matter how watertight they are — and inspect them for corrosion. After you've gone to all this trouble, they should be as dry as a desert, but you cannot know without checking.

Don Casey became the authority on boat fix-it projects with This Old Boat. *He and his wife, Olga, have been cruising aboard their 1969 Allied Seawind,* Richard Corey, *since 2002. See the editorial on page 5 for more about Don and his connection to* Good Old Boat.

Grampian 26

A capable, inexpensive pocket cruiser from Canada

by Gregg Nestor



Grampian 26 #412, *Fire Flies*, owned by Edwin "Chip" Hessler of Sandusky, Ohio, ghosts along in light air.

In the early 1960s, Jim Bisiker, in collaboration with Dirk Kneulman and John Burn, formed Canada's first production sailboat company — Grampian Marine Limited. The name came from the Grampian Mountains near Aberdeen, Scotland, where Jim's grandmother lived. At their new facility in Oakville, Ontario, they began making fiberglass sailing dinghies and small motorboats. After learning the techniques of fiberglass fabrication from The Anchorage, the Rhode Island builder of Dyer dinghies and larger craft, they began building Dyer boats under license. And for a brief period of time Grampian imported and sold Shearwater catamarans that were manufactured by Fairey Marine in Hamble, England.

As time went on and the company's expertise and reputation grew, Grampian Marine began manufacturing boats for a host of companies, including Triangle Marine, US Yachts, Fairey Marine, and O'Day. Grampian also built two traditional full-keel yachts, a 31-footer designed by Peter van Dye and a 37-footer by Sparkman & Stephens. It wasn't until the late 1960s, however, that Grampian Marine began building its own designs.

In-house designs

In 1967, Alex McGruer II became Grampian's first in-house designer. Having grown up within the confines of McGruer and Company (the family's boatbuilding business that was established in 1911), Alex was an experienced yacht designer. Upon joining Grampian, his orders were to design simple, comfortable boats that sailed well. More specifically, his first assignment was to develop a seaworthy boat large enough for a family of four, with 6-foot headroom, yet small enough to be trailerable. This mandate resulted in the popular Grampian 26.

Grampian's line of cruising sailboats soon ranged from 23 to 46 feet and they built a 17-foot daysailer as well. Since much of Grampian's production was destined for the U.S. market, they also opened a plant in North Carolina.

The company grew and things went well until 1977, when the weak Canadian dollar, coupled with competition from U.S. builders, drove the company out of business. Price Waterhouse, acting as receiver, liquidated the company's assets before it declared bankruptcy. Tanzer Industries took over the North Carolina facility; the Oakville assets were sold to several buyers. By the fall of 1977, Grampian Marine was no more.

Design

The Grampian 26 has nice lines with its spoon bow, delicate sheer, and flat counter stern. Unfortunately, its ample freeboard, especially the high sides and boxiness of its cabin trunk, can overshadow its more delicate features. The somewhat ungainly cabin structure, however, is exactly what made this boat so popular. With 6-foot standing headroom and a sense of spaciousness below, the Grampian 26 became the company's best seller. Its popularity was nearly instantaneous, and 200 boats were ordered the first year. During its 8-year production run, which

The mast is stepped on a shoe. By tightening and loosening the forestay and backstay, the mast's rake can be adjusted slightly forward or aft to correct weather or lee helm.

The high cabin sides of the Grampian 26 create 6-foot headroom inside, but also give the boat a somewhat boxy look, distracting the eye from the pleasant sheer.

began in 1969, nearly 1,000 hulls came off the line.

Although most Grampian 26s have deep fin keels, some were built with a keel/centerboard combination. These shallow-draft centerboard boats are trailerable. Both keel configurations were fitted with spade rudders and tiller steering. The Grampian 26's displacement/LWL ratio of 243 is moderate and suggests a seakindly coastal cruiser. Its ballast/displacement ratio of 47 percent makes for a fairly stiff boat. On the performance side, PHRF rates the fixed keel version at 213 and the centerboarder at 222. Both numbers suggest respectable performance for a family cruiser. For comparison, a similar vintage Columbia 26 rates 228 seconds per mile and a Pearson 26 rates 210 to 222, depending on the fleet.

Construction

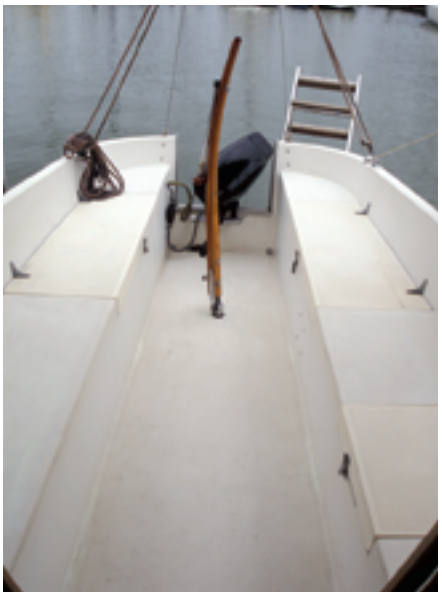
Like many of the boats built during the early years of fiberglass production, the Grampian 26 was heavily laminated. Its hand-laid hull is thick and solid and its deck is cored with balsa.

A fiberglass pan bonded to the inside of the hull functions as a foundation for interior features, such as berth flats. The pan does not extend over the entire hull. Instead, it terminates at hip height. Those remaining portions of the hull, from hip height to deck level, are covered with a foam-backed fabric. Overhead, a second fiberglass liner covers the inside of the cabin trunk down to deck level. This combination of fabric and liners conceals all the boat's unfinished interior fiberglass surfaces.

The hull-to-deck joint is an inward-facing flange. It is bonded with an adhesive and mechanically fastened every 6 inches with stainless-steel bolts. The bolts also secure slotted anodized aluminum toerails along the full length of the boat.

In both configurations, the keels are made of cast iron. They are fastened externally by means of 1-inch iron bolts, although stainless steel would have been a better choice. The fin keel draws 4 feet 3 inches and the centerboard model has a 3-foot fixed draft (with the board down it's 6 feet 6 inches). Both the centerboard and rudder are made of solid fiberglass. The rudder stock and the metal skeleton inside the rudder's fiberglass body are constructed of stainless steel.

The joinerwork is acceptable and consists mainly of plywood veneered with a plastic laminate and trimmed



The cockpit, at left, is 7 feet 10 inches long and, with the tiller out of the way, there's room for a dance. The icebox, above, is accessible from the cockpit, which means you don't have to go below to grab a cold one. The starboard seat locker, at right, houses the gas tank and has plenty of room left over for lines, fenders, and other gear.

The hanging locker, at left, is opposite the head. The V-berth, above, has a removable insert. The compact galley, at right, doesn't have a lot of room for meal preparation. Note the single-burner butane camp stove underneath the countertop.

with solid teak. Most of the panels are faced with a wood-grain patterned laminate. The one exception is the head, which is white laminate. The cabin sole is painted plywood.

Deck features

While the Grampian 26's foredeck is reasonably spacious, its 7-inch wide sidedecks are extremely narrow. This encourages sailors to take the cabintop route when going forward. Fortunately, the combination of the teak handrails flanking the cabintop and a good quality non-skid make this adventure somewhat less daunting. On the bow, a stainless-steel pulpit and single lifelines add to the feeling of security.

Of the three fixed portlights on each side of the cabin trunk, the two forward ones are quite small while the aft one is quite large. On the cabintop, in addition to the teak handrails, there's an opaque fiberglass forward hatch, a Dorade vent over the head, and the companionway's sliding hatch. There is no sea hood.

After the Grampian 26's high-sided cabin, the boat's other notable exterior feature is the cockpit. It's a generous 7 feet 10 inches long with reasonably high coamings and comfortable seats. Tiller steering makes it seem even more spacious, and a removable cutout in the transom reveals a mount for an outboard motor.

Storage is provided by port and starboard seat lockers, plus a cockpit-accessible icebox The starboard locker is shallow. In addition to housing the gas tank for the outboard motor, it's best suited for stowing docklines and emergency gear. The cavernous port locker is home to the manual bilge pump, among other things. The icebox is deep and has a sliding shelf for easy access. It is marginally insulated, however, and drains to the bilge. To facilitate good drainage, the cockpit sole slopes noticeably aft, directing water to a pair of 1½-inch through-transom drains. There is no bridge deck and the companionway sill is quite low.

Grampian 26

Designer: Alex McGruer
LOA: 6 feet 0 inches
LWL: 21 feet 9 inches
Beam: 8 feet 4 inches
Draft (keel): 4 feet 3 inches
Draft (cb): 3 feet 0 inches/6 feet 6 inches
Displacement: 5,600 pounds
Ballast: 2,600 pounds
Sail area: 325 square feet
Displ./LWL ratio: 243
Sail area/displ. ratio: 16.5
Bridge clearance: 36 feet

Belowdecks

By today's standards, the interior of the Grampian 26 may seem Spartan, but in 1967 its 6-foot headroom, berths for four, head, and galley were extremely appealing and well received by the buying public. The layout is straightforward and consists of a V-berth, followed aft by a head and a convertible dinette to port, and a hanging locker, galley, and quarter berth to starboard.

The V-berth is large enough for average-sized adults. Full-length shelves are installed above. Several stowage bins, plus the potable water tank, are located beneath the V-berth. There is no deck fill for the tank. If the boat is fitted with the optional marine toilet, this area will also house the holding tank.

Aft and to port is the enclosed head with a hanging locker across the way to starboard. The standard head facilities

consist of a portable toilet and stowage outboard. The doors of the head and hanging locker swing to close off the passageway and provide fore-and-aft privacy. Four small portlights illuminate this area. The forward hatch and Dorade vent add ventilation.

The portside dinette seats four adults and converts into a narrow double berth. In addition to a bookshelf outboard, stowage compartments are located beneath the seats. A convenient cutlery drawer is fitted to the underside of the table. The tabletop is covered with a no-nonsense plastic laminate for easy maintenance.

Amidships and to starboard is the galley, which has a single deep stainless-steel sink with hand pump, a recessed shelf designed to accommodate a single-burner cooktop, and a good-sized counter area. A perimeter shelf and cabinetry beneath provide stowage for galley gear and provisions. The remaining two large portlights and the companionway hatch provide light and air circulation to the galley and dinette.

"Because the overwhelming majority of the Grampian 26s came with outboard engines, the area behind the companionway steps and dinette lacks mechanical systems and is cavernous."

Continuing aft, behind the galley is a large quarter berth, measuring 6 feet 4 inches by 30 inches. Several stowage bins, the battery box, and a dedicated fire extinguisher compartment are beneath this berth.

Because the overwhelming majority of the Grampian 26s came with outboard engines, the area behind the companionway steps and dinette lacks mechanical systems and is cavernous as a result. One gains access to this space through the port cockpit locker or by removing the companionway ladder.

The rig

The Grampian 26 is a masthead sloop with a sail area of 325 square feet. Its sail area/displacement ratio is 16.5, in the range of a conventional cruising sailboat. The boat's aluminum mast is stepped on deck in a shoe in which it can be adjusted to correct for weather or lee helm. A support truss is employed in lieu of a compression post. This athwartship structural member is positioned just forward of the forward bulkhead and is supported by the cabin sides. The mast has a bridge clearance of 36 feet. The single-spreader rig is supported by a pair of cap shrouds, fore and aft lowers, a forestay, and a split backstay. The chainplates are bolted to knees glassed to the hull.

On Chip Hessler's *Fire Flies*, which served as our test boat, double-braided polyester halyards run through

The dinette table, above, can be lowered to form a single berth, at left. On outboard motor models, the absence of an engine underneath the cockpit means extra stowage space, at right.

external sheaves and belay to cleats on the mast. A pair of single-speed halyard winches are mounted on the mast. The boat has no headsail sheet tracks. Sheets are led through snatch blocks positioned on the slotted toerail and then aft to primary winches mounted forward on the cockpit coamings. Originally equipped with British-made Gibb single-speed winches, *Fire Flies* had her primaries upgraded to Barient self-tailers.

The main is sheeted end-boom to the transom in a triangular configuration often referred to as a Crosby rig. The fiddle block is mounted to the starboard corner and can be awkward to use on all points of sail. As was common in its era, the Grampian 26 came with roller reefing. Other sail controls include a topping lift and downhaul.

Because the companionway sill is somewhat low, the lower hatchboard is best left in place during bad weather.

Under way

Contrary to Grampian's marketing claims, the Grampian 26 is not a performance boat. It is a cruising sailboat that is stiff and reasonably well balanced. The boat is not particularly close-winded nor is it a light-air performer, and its off-the-wind performance is considered only average. While the boat can carry a full set of sails in a near blow, it's best and more comfortable to reef earlier, say between 15 and 20 knots.

Most of the 1,000 or so Grampian 26s were fitted with outboard motors. The standard Chrysler outboard in the 20- to 25-hp range was heavy for this boat. A 9.9-hp is a better fit. For an additional $2,000 or so, an inboard engine was available as an option and, during its 10-year production run, a variety of power plants were used. These included the gasoline-fueled Atomic 4 and Palmer and the single-cylinder Volvo and Yanmar diesels.

When it comes to seaworthiness, the Grampian 26 is quite capable of ocean sailing. At least one has crossed the Atlantic and several have cruised from the Great Lakes to the Caribbean and back.

Things to check out

As is the case with most any boat that has celebrated at least 30 birthdays and possibly closer to 40, any issues with the Grampian 26 are well documented. Prior to making an offer, several potential problem areas should be noted and investigated by a competent surveyor:

"The once very popular Grampian 26 is a strongly built and roomy cruiser . . . and has proven itself on at least one ocean."

- Osmotic blistering
- Gelcoat cracking and crazing
- Portlight leaks (rubber seal failure)
- Deck delamination
- Cracks in aluminum stemhead fitting
- Splitting of the rudder
- Rusty keel bolts and backing plates
- Loose keel that needs tightening
- Deck compression around mast base
- Aluminum electrical wiring

Conclusion

The once very popular Grampian 26 is a strongly built and roomy cruiser. The boat is easy to handle in a variety of conditions and has proven itself on at least one ocean. Generally speaking, the boat has probably reached its terminal depreciation. Its age, how it has been maintained, and any upgrades that have been made over the years will be the main factors influencing the price of any individual boat. On the used-boat market, the Grampian 26 represents a good buy. Expect to pay less than $10,000 for an outboard model. The rare inboard boats run about $1,500 more.

Gregg Nestor, a contributing editor with Good Old Boat, *developed a keen interest in sailing while growing up on the southern shore of Lake Erie. His third book,* The Trailer Sailer Owner's Manual: Buy-Outfit-Trail-Maintain, *will soon be released. When he's not writing about sailing, Gregg and his wife, Joyce, cruise aboard* Raconteur, *their Pearson 28-2.*

Resources

Grampian Owners Association
<http://www.grampianowners.com>

Small is bountiful

Size evokes no envy when sailing is its own reward

by Dale Phillips

My wife, Jen, and I were settling down in one of our favorite anchorages after a hard but rewarding day of sailing. We'd broken out the margaritas and were enjoying the last of the hot summer day. Out in the lake, we could see another boat approaching our popular little bay. She was, as Jen likes to say, "a big girl" and obviously very new. She certainly was an impressive sight, her perfect white hull and sails gleaming as she slashed across Lake Champlain toward us. As she neared the entrance to the anchorage, she turned into the wind and her main and genoa simultaneously began to furl. "They must have electric furling," Jen said.

I nodded in agreement, "I think they were on autopilot as they sailed up; I didn't see anyone near the wheel."

Sails furled, the boat turned into the bay. There was a spot open next to us, and her skipper steered her over. She towered above our 30-footer, her diesel barely making a sound. A nice looking couple in their thirties were in the cockpit. We exchanged waves, and a moment later their electric windlass began dropping their anchor. The couple fussed about the cockpit for a few moments, then disappeared below. The sound of a generator and air conditioner thrummed in the quiet little bay.

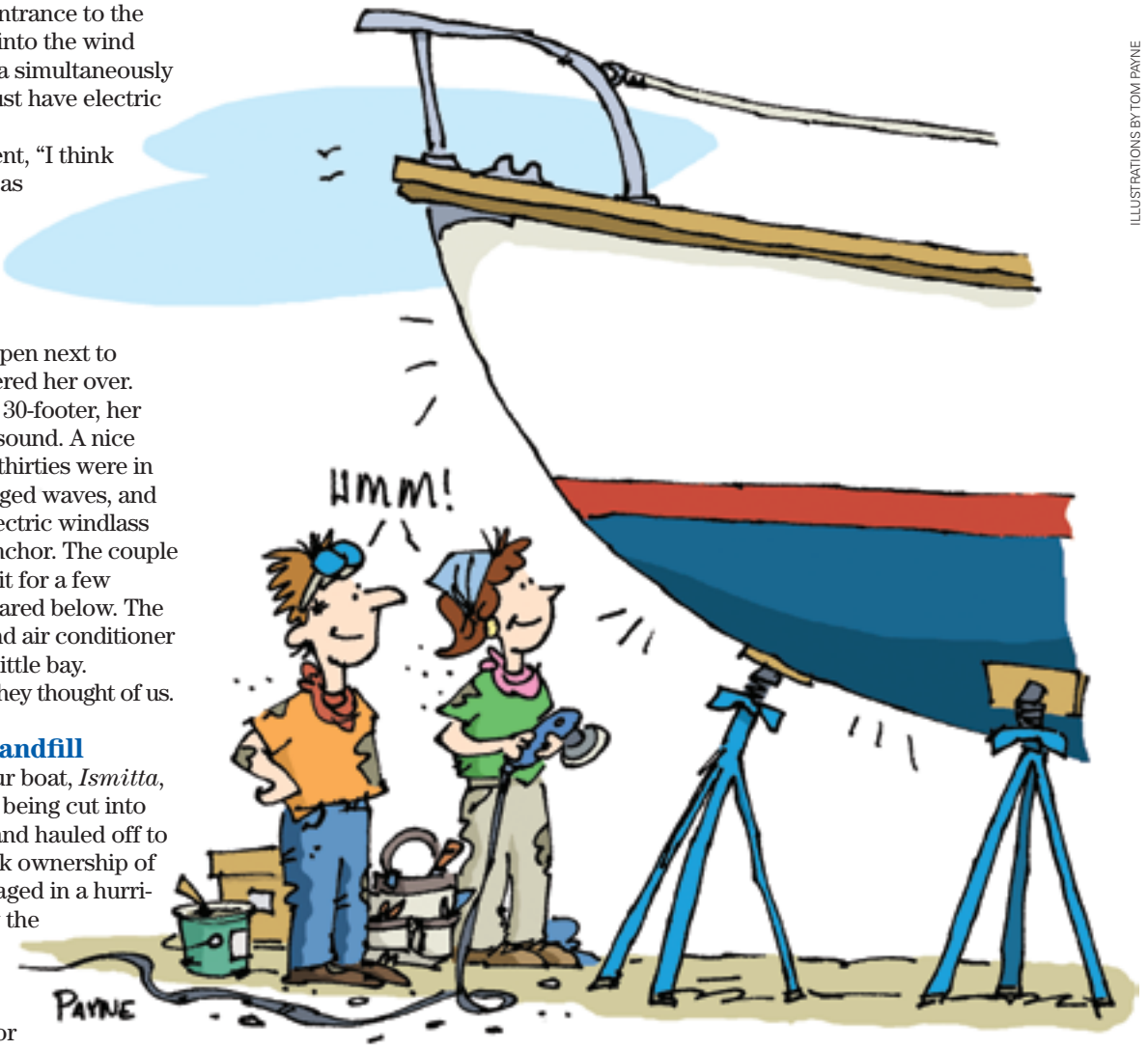
We wondered what they thought of us.

Almost off to the landfill

I should explain that our boat, *Ismitta*, was a week away from being cut into pieces by a chain saw and hauled off to the dump when we took ownership of her. She had been damaged in a hurricane and written off by the insurance company. Jen and I worked on her for two years before she was ready for the water. Every spring, we upgrade her a little more. Jen is masterful at restoring wood, and *Ismitta's* brilliantly finished woodwork gleams. While Jen has applied her good taste and design skills to decorating our lovely little cabin, I have focused on the structural and mechanical aspects. We make a good team, and we're proud of our boat and our accomplishments. However, our brave little vessel appeared a little shabby and quaint next to the gleaming behemoth nearby.

That afternoon and evening, Jen and I swam, chatted, got a little tipsy on margaritas, grilled our dinner, and gossiped about the goings-on in the anchorage. We then had a cutthroat game of rummy in the cabin before retiring. The couple next to us spent the day in the luxury of their air conditioning. From the sounds and the purplish light that flickered from their ports, we imagined they were watching a DVD.

In the morning, as we were having coffee, they reappeared. Wishing us



ILLUSTRATIONS BY TOM PAYNE

good morning, they pushed a button on their windlass and their anchor began to reel itself in. A few moments later, their sails unfurling as if by magic, they were off down the lake.

"That was a nice boat," Jen observed.

Economic realities

For those of us with good old boats like *Ismitta*, certain economic realities play a role in our sailing experiences. Sometimes we find it intimidating to be in the proximity of the boats of wealthy people. Jen and I acquired *Ismitta* for complex reasons. We felt sorry for her; we liked how she looked, and we thought we could save her. But the primary reason was that a boat like her, in the condition she was in, was all we could afford. We could no more buy the boat that had spent the evening beside us than we could a Lear Jet.

These economic realities permeate sailing and the sailing community.

"We have found that our days spent getting *Ismitta* ready for the sailing season are nearly as rewarding as the days we actually sail her."

Socio-economic factors play a role in every aspect of what sailing is. Consider the spring rituals associated with getting our boats ready for the sailing season. Many of the lovely new boats at our marina are professionally maintained. As Jen and I labor over *Ismitta*, checking off items on a very long to-do list, we might see a car pull up to one of these boats. A couple emerges and looks things over for an hour or so. In a couple of days, a professional detailer shows up with buffers and wax and goes to work. Yard workers appear, scurrying over her hull. A couple of days after that, the cradle is empty, and the gleaming vessel is in the water. We labor on, partly because our boat needs more attention and partly because it takes us longer to do things than it does the professionals.

At our marina, the yard workers have been generous with their time as they explained how to do some of the trickier operations we have tackled. We like to think they have respect for people who are willing to do their own work. They probably feel sympathy when they see my skinned knuckles and grease-stained clothes. On the other hand, I recently did for less than $30 a repair to our engine for which the yard had submitted an estimate of $1,200. Jen's remodeling of the interior and woodwork would have cost untold thousands of dollars.

“While it might be nice to have other people do the dirty and unpleasant jobs . . . we would have been denied the pride and pleasure that comes from doing something ourselves.”

Fellowship in labor

We work together, learning as we go, and we are slowly acquiring complementary and wide-ranging sets of skills and knowledge. We have found that our days spent getting *Ismitta* ready for the sailing season are nearly as rewarding as the days we actually sail her. Other owners of good old boats are there too, and the sounds of power tools in the air are joined by those of conversation and laughter. They come to visit us, to chat, to borrow tools, and to offer and seek advice. As *Ismitta* nears completion, Jen and I often step back and look at her on her stands, admiring our work and the beauty of our vessel. We have now sanded, painted, varnished, or otherwise reworked every square inch of *Ismitta*. She is now approaching the point where she is just the way we want her. We love her.

Altering the experience

The choices inherent in having a lot of, or very little, money have the effect of altering the essential experience of sailing. I believe these choices have both positive and negative aspects. While it might be nice to have other people do the dirty and unpleasant jobs associated with sailboat restoration and maintenance, we would have been denied the pride and pleasure that comes from doing something ourselves. The security that some feel from knowing a job was done by professionals is tempered by the fact that those folks haven't acquired the skills to do it themselves, should the need arise. Having an advanced, highly automated boat means that you are not as involved in sailing her. And, at least for some sailors, these boats serve to isolate and disengage their sailors from the very things I treasure the most from the sailing experience.

That is the central point for me. How involved are you in your sailing? At what point do you evolve from being a sailor to being a passenger? I argue that one of the primary pleasures of restoring/maintaining/sailing a good old boat is the absolute level of involvement it entails. We know *Ismitta* inside and out. We are involved in every aspect of her existence. When we sail, we are a team of three — or maybe more accurately, a single entity.

Familiar rituals

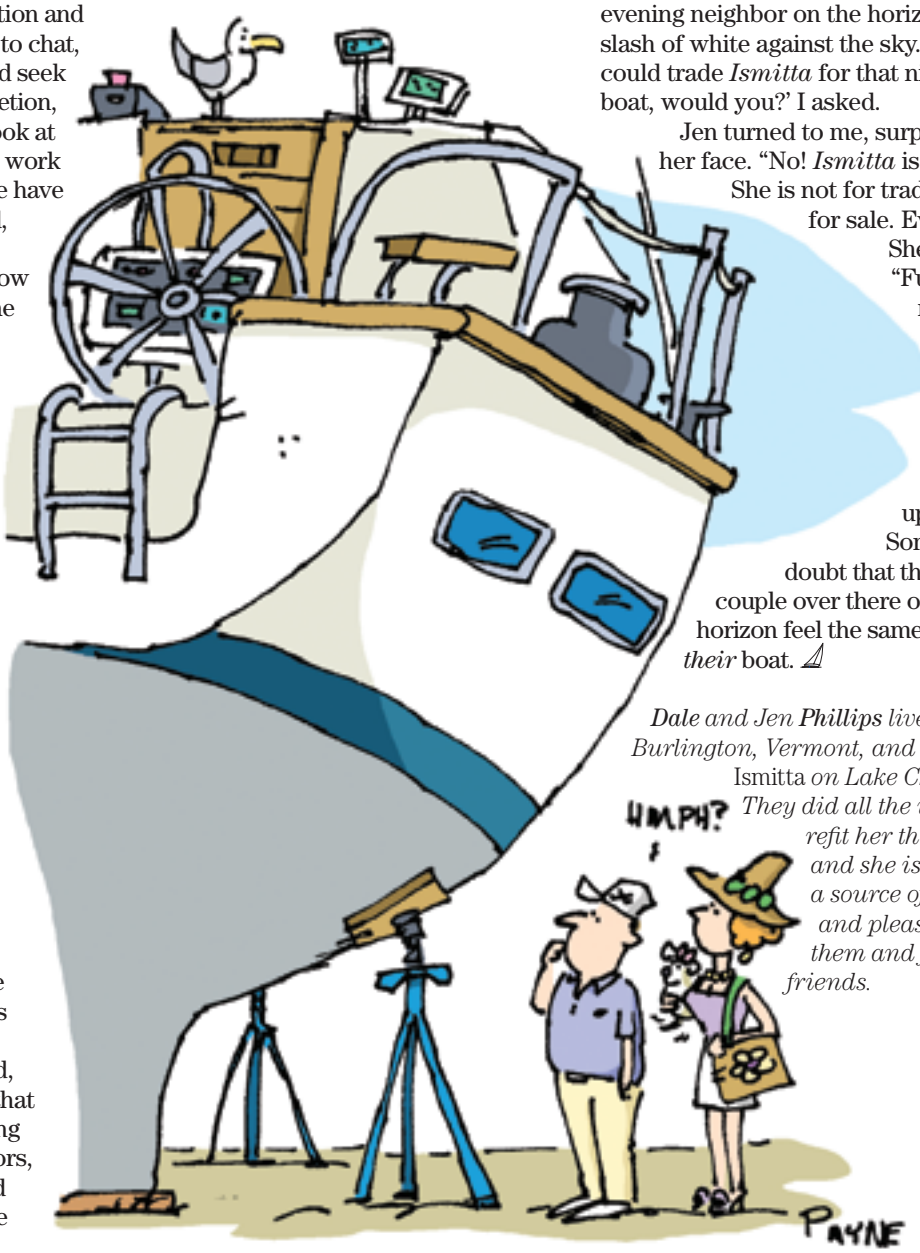
An hour later, I went forward to lift the anchor as Jen started the engine. She has a little trick she uses to start the engine when it's cold. This anchorage has a muddy bottom, and the anchor can get bogged down and difficult to extract. I have a little technique that I use to draw on the boat's momentum to free it. I take the helm while Jen goes forward and hoists the sails.

Soon we were surging through the clear blue waves. We could see our evening neighbor on the horizon, a slash of white against the sky. “If we could trade *Ismitta* for that nice big boat, would you?' I asked.

Jen turned to me, surprise on her face. “No! *Ismitta* is our child. She is not for trade and not for sale. Ever.”

She paused, “Furthermore, don't talk like that in front of *Ismitta*, you'll upset her.”

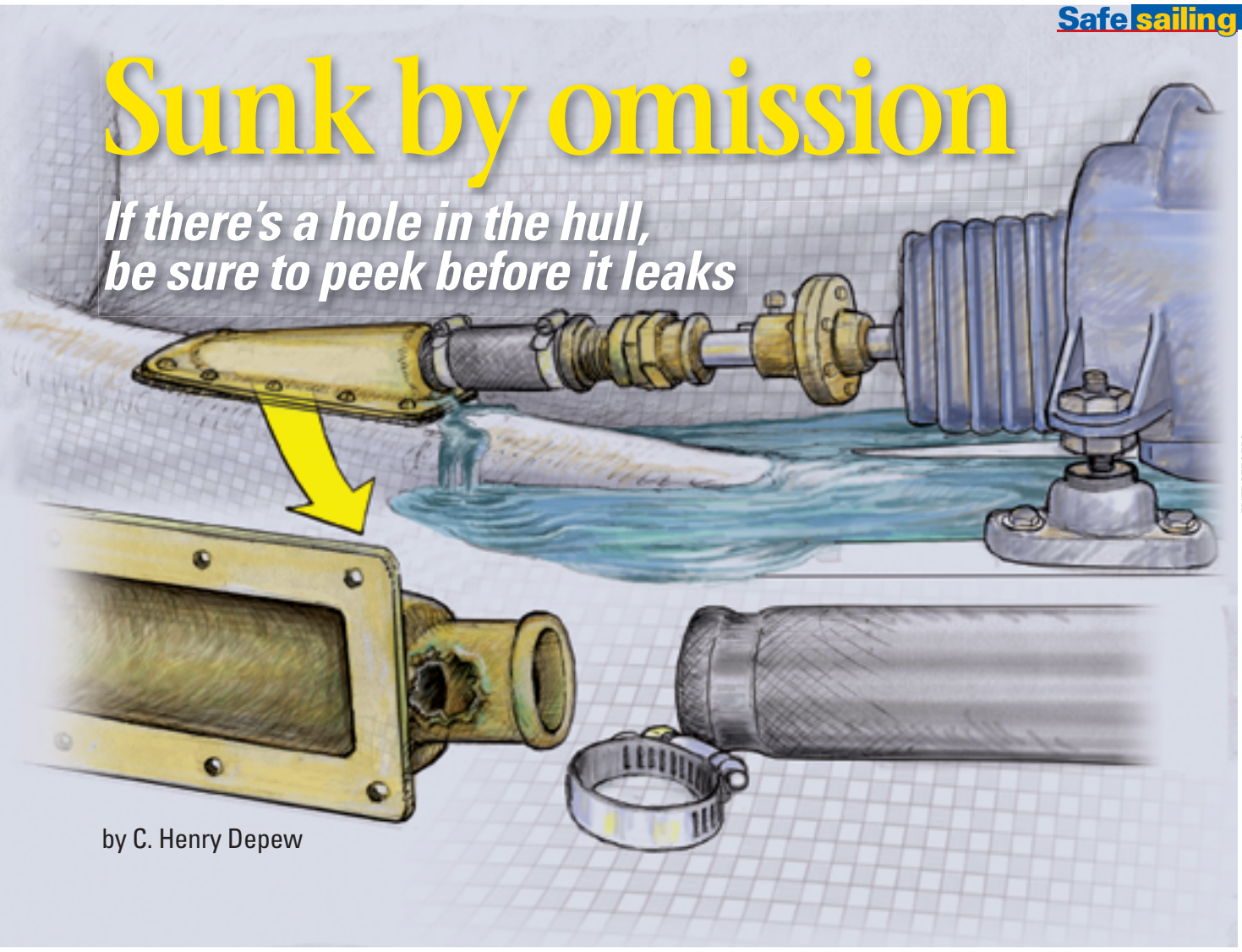
Somehow, I doubt that the young couple over there on the horizon feel the same about *their* boat.



Dale and Jen **Phillips** *live in Burlington, Vermont, and sail* Ismitta *on Lake Champlain. They did all the work to refit her themselves, and she is now a source of pride and pleasure for them and for their friends.*

Sunk by omission

If there's a hole in the hull, be sure to peek before it leaks



FRITZ SEEGERS

by C. Henry Depew

Every inboard-powered boat has a number of holes through its bottom. The cooling-water intake, the rudder, and the shaft log contribute a minimum number. When a boat springs a leak, these are the first places to check. But what if it's next-to-impossible to get to the rudder-packing nut or to the the shaft log and its packing nut?

A trimaran tied up next to my boat sank three times. On each occasion, the outer hulls, or amas, held the boat up while the main hull filled with water. Twice, the owner pumped the boat out. After the third sinking, a major storm came through our area and flooded the boat (and the amas) and left it on the bottom. The owner gave it up as a lost cause and a few months later the wreck was lifted from the water with a crane and cut up for removal.

Since the owner was both elderly and unwell, I made an arrangement with him to pull off what was salvageable to sell. Among other items to be saved, I cut out the rudder assembly (in very good shape) and also removed the shaft-log and packing-nut assembly. When I disconnected the hose from the fixed part of the assembly, I discovered the reason the boat sank. A section of the shaft log was simply gone — there was a hole where there should have been metal.

This, of course, was in the aft part of the boat that was difficult to reach because there was little room to get around the engine. The shaft log had probably not been inspected since the engine was installed in the boat.

The trimaran was built in 1991 and had been floating in the harbor for a number of years. In 2005, the surge from Hurricane Dennis put the boat ashore with no damage. It had since been re-floated and was being restored when the sequence of sinkings began. Since the boat had been floating fine up to that point, my best guess is that when the owner got the engine running, the turning of the propeller shaft finished the weakened metal in the shaft log and started the leak in the gap between the missing metal and the rubber hose. I believe the lesson here is to make sure that you can get to every one of the underwater fittings on your boat and to check them regularly.

Very often, the parts of a boat most prone to leaks are the least accessible. This only makes it more important to inspect them regularly to forestall the serious consequences of a failure.

As a youngster, C. Henry Depew learned to sail on an Optimist Pram. Flying Juniors followed during the college years. Later he bought and rebuilt a blizzard of sailboats (nine in six years). He is active in the United States Power Squadron and sailboat racing activities with the Apalachee Bay Yacht Club.

Light up the night

A good old boater lightened the prospect of after-dark landfalls with a portable searchlight mounting.

A remote-control searchlight on a sailboat is a bright idea

by Frederick Corey

While preparing my Caliber 28 for a recent solo sail up the East Coast, I was in search of an affordable searchlight I could control from the cockpit. I thought I might have to navigate or enter harbors at night. The thought terrified me, but I knew it might happen and I wanted to be prepared. The challenge was finding the right light and figuring out where to mount it.

First, I found an innovative searchlight company called GoLight. It makes a wide variety of remote-controlled searchlights with several mounting options designed for marine, military, and commercial applications. The RadioRays, with 400,000 candlepower at 5.5 amps, are weatherproof and come in white or black ABS for $200 plus. The newer Strykers have a brighter bulb, are nearly waterproof for more rigorous sea duty, and are also available in chrome for $300 plus.

With my prep fund running low, I wanted the least expensive solution that would still serve my needs, so I sought advice from GoLight. They were honest and helpful. After discussing my needs with them, I concluded the RadioRay 7900 with a suction-mounted base, a separate mounting shoe, and hand-held remote control would be a good choice. It turned out to be a great choice.

Mounting matters

Challenge two was where and how to mount it. Unlike those on powerboats, foredecks on sailboats don't lend themselves to permanently mounting a searchlight. Any fixture placed near the stem could interfere with anchoring, docking, or sail-handling. The beam had to be able to illuminate to port, starboard, and straight ahead without being blocked by shrouds, stays, or spars. And, as my boat mostly lives on a mooring, the beam also had to clear my anchor platform and illuminate the mooring pendant immediately in front of the boat. For me, the best location to mount the light was on top of the pulpit, but since that would put it in the way some of the time, it had to be temporary. The light, therefore, had to be easy to detach.

A careful tracing

To position the clips, I laid the plywood atop my pulpit and traced a line underneath the front and back of the bow pulpit. While doing this, I held the plywood in place with spring clamps. Because a misaligned clip could prevent the other clips from clamping onto the bow pulpit, I was careful to trace the best line I could. I initially attached each of the clips using one screw only.

> "Unlike those on powerboats, foredecks on sailboats don't lend themselves to permanently mounting a searchlight."

For the platform, I fabricated a boomerang of ¾-inch marine plywood on which I attached the mounting base for the GoLight. By attaching four black-plastic 1-inch spring clips on its underside, I was able to clip the boomerang to the pulpit's 1-inch stainless-steel tubing. I rounded-over all the plywood edges for handling and to minimize snagging lines or sails. The GoLight slides and locks into the base. It is just as easily removed.

For my Caliber, a single piece of plywood suited my flatter pulpit. For older Bristols, Pearsons, and other boats with a curved rail, it might be necessary to fabricate an L-shaped platform that would clip to the top and to the front or side rails. I think three clips are a minimum and four or five are best.

This allowed them to swivel a bit as I worked to achieve the best possible alignment. Not until I was pleased with the fit did I add the second screw.

I first made the platform for my light in a semicircular shape, but I found it hard to hold when carrying it on deck, so I reshaped it in the form of a boomerang. I later added a just-in-case lanyard that wraps around the bow rail and comes back to a small cleat on top. It occurred to me that if a flailing sail (or arm) happened to dislodge the searchlight base from the rail at just the wrong moment, I could lose my light source at a critical time. Worse, if the light plunged into the sea, it could short the circuit or ruin the light.

For power, I installed a 12-volt cigarette lighter socket in the forward cabin, and led the 15-foot power cord down through the forehatch. To avoid crimping or degrading the heavy-gauge cord in a closed hatch frame, I added heat-shrink tubing for chafe resistance. It's important to check your hatch frame to locate the softest entry points.

Lighting the way

I usually snap the boomerang in place first, without the light, and cleat the lanyard. Then I open the forehatch, retrieve the GoLight from a V-berth shelf, and slide the light into place. Though I'm always clipped on to the jacklines, I wanted to be able to complete both steps using just one hand.

Using the hand-held remote from the helm, I can horizontally swivel the searchlight 370 degrees and from as close as 8 feet in front of the boat to as high as the masthead. I can use my searchlight like a headlight, lighting my path down a channel. I can illuminate my sails, the better to be seen by bigger ships at night or to light up the foredeck when needed. Also, because the furler and mast block the beam from shining aft, it's not likely that I'll be blinded by the light at the helm.

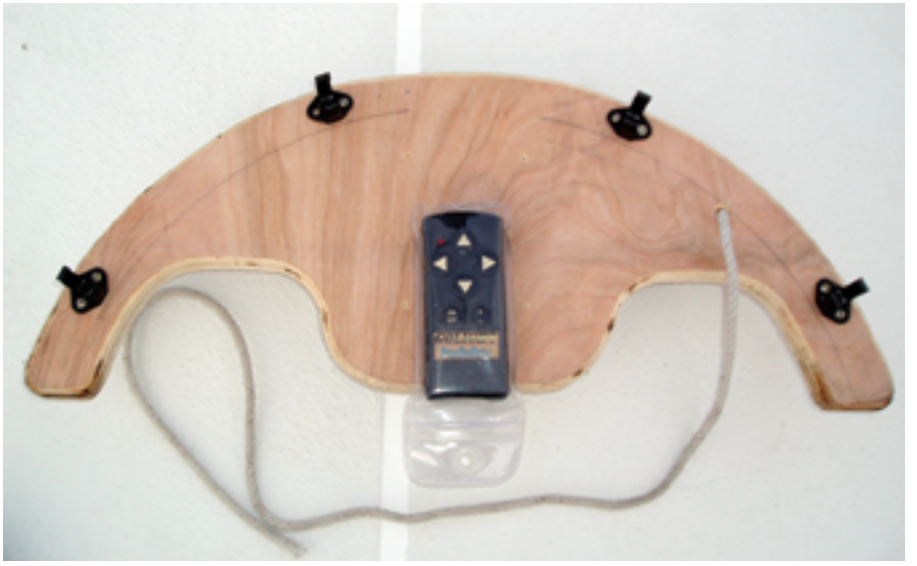
A neat feature on the remote allows me to adjust the sweep rate, or how quickly the light swivels. I prefer a slower sweep rate so I can scan port-to-starboard for the reflective strips on mooring balls and on nuns and cans.

An extra benefit is that I can use my GoLight year-round. My 7900 has a suction-mounted base, to allow temporary mounting to a car, truck, or trailer roof for nighttime trailer loading, tire-changing, or camping. A magnetic mount is also available for use when a vehicle is moving.

Frederick Corey, a furnituremaker, sails New England in fixed-up GOBs and dreams of following his role models, Fatty Goodlander, Fritz Seyfarth, and Herb Payson.

Resources

GoLights are sold at West Marine, Boater's World, Cabela's, and Bass Pro. On the Internet, go to <http://www.golight.com>.



A view of the underside of the "boomerang" shows the clips with which it attaches to the bow pulpit and the "just in case" lanyard that keeps it there.

As well as swiveling through more than 360 degrees laterally, the searchlight beam rotates vertically. Depressed at this angle, it can shine on a mooring buoy.

Editor's Note: The Riddle of the Sands *is the evergreen sea story about sailing a small boat. Its principal characters are its narrator, Carruthers, and his friend Davies, who, while cruising his little* Dulcibella *in the waters of German Friesland, thinks he has stumbled across activities that pose a threat to Britain. He knows the "who," he thinks, but not the "how" or the "when." Davies has summoned Carruthers from London to help him unravel the mystery. The pair then weave two delicate courses, one in the* Dulcibella *among the treacherous sandbars and the other between the social and business worlds of the locals ashore and afloat. We hope these excerpts will give you a taste for the book, and especially for the recorded version recorded by www.AudioSeaStories.com.*

The Riddle of the Sands

by Erskine Childers

Chapter 4 – Retrospect

"Isn't this rather an open anchorage?" I suggested.

"It's only open from that quarter," he replied. "If it comes on to blow from there we shall have to clear out; but I think it's only rain. Let's stow the sails."

Another whirlwind of activity, in which I joined as effectively as I could, oppressed by the prospect of having to "clear out" — who knows whither? — at midnight. But Davies's sangfroid was infectious, I suppose, and the little den below, bright lit and soon fragrant with cookery, pleaded insistently for affection. Yachting in this singular style was hungry work, I found. Steak tastes none the worse for having been wrapped in newspaper, and the slight traces of the day's news disappear with frying in onions and potato chips. Davies was indeed on his mettle for this, his first dinner to his guest; for he produced with stealthy pride, not from the dishonored grave of the beer, but from some more hallowed recess, a bottle of German champagne, from which we drank success to the *Dulcibella*.

Chapter 8 – The theory

Davies leaned back and gave a deep sigh as though he still felt the relief from some tension. I did the same and felt the same relief. The chart, freed from the pressure of our fingers, rolled up with a flip, as though to say, "What do you think of that?"

"What about Dollmann?" I asked.

"Of course," said Davies, "what about him? I didn't get at much that night. It was all so sudden. The only thing I could have sworn to from the first was that he had purposely left me in the lurch that day. I pieced out the rest in the next few days, which I'll just finish with as shortly as I can. Bartels came aboard next morning and, though it was blowing hard still, we managed to shift the *Dulcibella* to a place where she dried safely at the midday low water and we could get at her rudder. The lower screw-plate on the sternpost had wrenched out, and we botched it up roughly as a makeshift. There were other little breakages, but nothing to matter, and the loss of the jib was nothing, as I had two spare ones. The dinghy was past repair just then, and I lashed it on deck.

"It turned out that Bartels was carrying apples from Bremen to Kappeln and had run into that channel in the sands for shelter from the weather . . . As you know, I had been running for the Elbe, but yesterday's muck-up put me off, and I changed my mind — I'll tell you why presently — and decided to sail to the Eider along with the *Johannes* and get through that way. It cleared from the east next day, and I raced him there, winning hands down, left him at Tönning, and in three days was in the Baltic. It was just a week after I ran ashore that I wired to you. You see, I had come to the conclusion that that chap was a spy."

In the end it came out quite quietly and suddenly, and left me in profound amazement. "I wired to you . . . that chap was a spy." It was the close association of these two ideas that hit me hardest at the moment. For a second I was back in the dreary splendor of the London clubroom, spelling out that crabbed scrawl from Davies and fastidiously criticizing its proposal in the light of a holiday. Holiday! What was to be its issue? Chilling and opaque as the fog that filtered through the skylight there flooded my imagination a mist of doubt and fear.

"A spy," I repeated blankly. "What do you mean? Why did you wire to me? A spy of what — of whom?"

"I'll tell you how I worked it out," said Davies. "I don't think 'spy' is the right word; but I mean something pretty bad.

"He purposely put me ashore. I don't think I'm suspicious by nature, but I know something about boats and the sea. I know he could have kept close to me if he had chosen, and I saw the whole place at low water when we left those sands on the second day. Look at the chart again. Here's the Hohenhörn bank that I showed you as blocking the road. It's in two pieces — first the west and then the east. You see the Telte channel dividing into two branches and curving round it.

"Both branches are broad and deep, as channels go in those waters. Now, in sailing in I was nowhere near either of them. When I last saw Dollmann he must have been steering

> "It was the close association of these two ideas that hit me hardest at the moment."

ILLUSTRATIONS BY FRITZ SEEGERS

straight for the bank itself, at a point somewhere here, quite a mile from the northern arm of the channel, and two from the southern. I followed by compass, as you know, and found nothing but breakers ahead.

"How did I get through? That's where the luck came in. I spoke of only two channels, that is, round the bank — one to the north, the other to the south. But look closely and you'll see that right through the center of the West Hohenhörn runs another, a very narrow and winding one, so small that I hadn't even noticed it the night before, when I was going over the chart. That was the one I stumbled into in that tailor's fashion, as I was groping along the edge of the surf in a desperate effort to gain time. I bolted down it blindly, came out into this strip of open water, crossed that aimlessly, and brought up on the edge of the East Hohenhörn, here. It was more than I deserved. I can see now that it was a hundred to one in favor of my striking on a bad place outside, where I should have gone to pieces in three minutes."

Chapter 12 – My initiation

"Where are we going to anchor for the night?" I asked.

"Under the Hohenhörn," said Davies, "for auld lang syne!"

Dusk was falling. The Hanover coastline, never very distinct, had utterly vanished; an ominous heave of swell was under-running the short sea. I ceased to attend to Davies imparting instruction on his beloved hobby and sought to stifle in hard manual labor the dread that had been latent in me all day at the prospect of our first anchorage at sea.

"Sound, like blazes now!" he said at last. I came to a fathom and a half. "That's the bank," he said; "we'll give it a bit of a berth and then let go."

"Let go now!" was the order after a minute, and the chain ran out with a long-drawn moan. The *Dulcibella* snubbed up to it and jauntily faced the North Sea and the growing night.

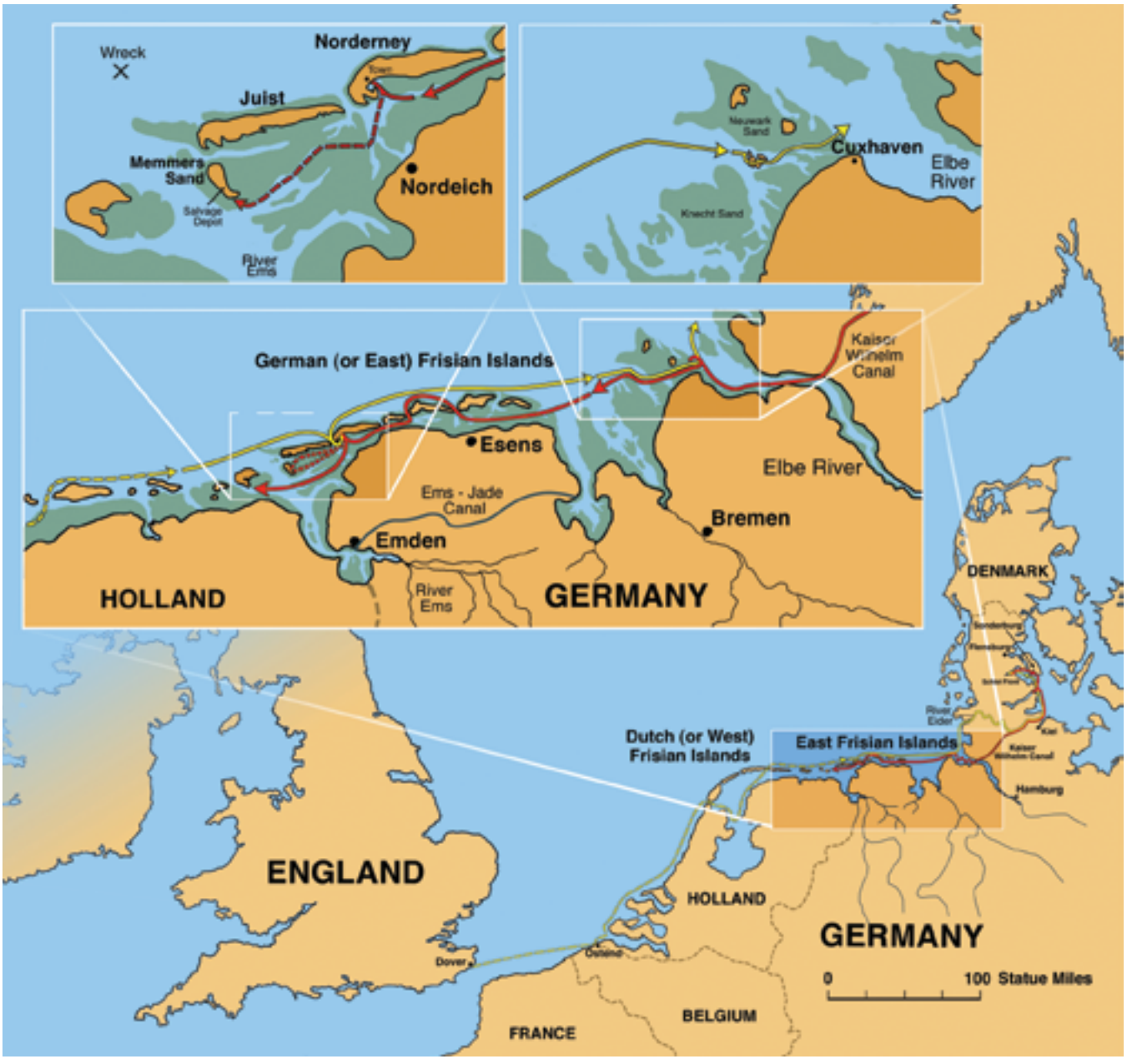
"There we are!" said Davies, as we finished stowing the

mainsail, "safe and snug in four fathoms in a magnificent sand harbor with no one to bother us and the whole of it to ourselves. No dues, no stinks, no traffic, no worries of any sort. It's better than a Baltic cove even, less beastly civilization about. We're seven miles from the nearest coast, and five even from Neuerk — look, they're lighting up." There was a tiny spark in the east.

"I suppose it's all right," I said, "but I'd rather see a solid breakwater somewhere; it's a dirty-looking night, and I don't like this swell."

"The swell's nothing," said Davies; "it's only a stray drain from outside. As for breakwaters, you've got them all round you, only they're hidden. Ahead and to starboard is the West Hohenhörn, curling round to the sou'west for all the world like a stone pier. You can hear the surf battering on its outside over to the north. That's where I was nearly wrecked that day, and the little channel I stumbled into must be quite near us somewhere. Half a mile away — to port there — is the East Hohenhörn, where I brought up after dashing across this lake we're in. Another mile astern is the main body of the sands, the top prong of your fork. So you see we're shut in — practically. Surely you remember the chart? Why, it's —"

"Oh, confound the chart!" I broke out, finding this flow of plausible comfort too dismally suggestive for my nerves. "Look at it, man! Supposing anything happens — supposing it blows a gale! But it's no good shivering here and staring at the view. I'm going below."



There was a *mauvais quart d'heure* below, during which, I am ashamed to say, I forgot the quest.

"Which soup do you feel inclined for?" said Davies, timidly, after a black silence of some minutes.

That simple remark, more eloquent of security than a thousand technical arguments, saved the situation.

"I say, Davies," I said, "I'm a white-livered cur at the best, and you mustn't spare me. But you're not like any yachtsman I ever met before, or any sailor of any sort. You're so casual and quiet in the extraordinary things you do. I believe I should like you better if you let fly a volley of deep-sea oaths sometimes or threatened to put me in irons."

Davies opened wide eyes and said it was all his fault for forgetting that I was not as used to such anchorages as he was. "And by the way," he added, "as to its blowing a gale. I shouldn't wonder if it did; the glass is falling hard; but it can't hurt us. You see, even at high water the drift of the sea —"

"Oh, for Heaven's sake, don't begin again. You'll prove soon that we're safer here than in an hotel. Let's have dinner and a thundering good one!"

Chapter 21 – Blindfold to Memmert

Before we reached the harbor, the fog was on us, charging up the streets in dense masses . . . Presently we stumbled up against the Harbor Office, which was our landmark for the steps where we had tied up the dinghy. The same official appeared and good naturedly held the painter while we handed in our parcels . . .

"You'll have a job to find her now," he said.

The distance was 80 yards at the most, but we had to use a scientific method . . .

"Row straight out at right angles to the pier," he said now. I did so, Davies sounding with his scull between the strokes. He found the bottom after 20 yards, that being the width of the dredged-out channel at this point. Then we turned to the right and moved gently forward, keeping touch with the edge of the mudbank (for all the world like blind men tapping along a kerbstone) and taking short excursions from it, till the *Dulcibella* hove in view. "That's partly luck," Davies commented; "we ought to have had the compass as well."

We exchanged shouts with the man on the pier to show we had arrived.

"It's very good practice, that sort of thing," said Davies, when we had disembarked.

"You've got a sixth sense," I observed. "How far could you go like that?"

"Don't know. Let's have another try. I can't sit still all day. Let's explore this channel."

"Why not go to Memmert?" I said, in fun.

"To Memmert?" said Davies, slowly; "by Jove! That's an idea!"

"Good Heavens, man! I was joking. Why, it's 10 mortal miles."

"More," said Davies, absently. "It's not so much the distance — what's the time? Ten-fifteen; quarter ebb — What am I talking about? We made our plans last night."

But seeing him, to my amazement, serious, I was stung by the splendor of the idea I had awakened. Confidence in his skill was second nature to me. I swept straight on to the logic of the thing, the greatness, the completeness of the opportunity, if by a miracle it could be seized and used.

Something was going on at Memmert today: our men had gone there; here were we, 10 miles away, in a smothering, blinding fog. It was known we were here — Dollmann and Grimm knew it; the crew of the *Medusa* knew it; the crew of the *Kormoran* knew it; the man on the pier, whether he cared or not, knew it. But none of them knew Davies as I knew him. Would anyone dream for an instant —?

"Stop a second," said Davies; "give me two minutes." He whipped out the German chart. "Where exactly should we go?" ("Exactly!" The word tickled me hugely.)

"To the depot, of course; it's our only chance."

"Listen then — there are two routes: the outside one by the open sea, right round Juist, and doubling south — the simplest, but the longest; the depot's at the south point of Memmert, and Memmert's nearly two miles long."

"How far would that way be?"

"Sixteen miles good. And we should have to row in a breaking swell most of the way, close to land."

"Out of the question; it's too public too, if it clears. The steamer went that way and will come back that way. We must go inside over the sands. Am I dreaming, though? Can you possibly find the way?"

"I shouldn't wonder. But I don't believe you see the hitch. It's the time and the falling tide. High water was about 8:15; it's now 10:15, and all those sands are drying off. We must cross the See-Gat and strike that boomed channel, the Memmert Balje; strike it, freeze on to it — can't cut off an inch — and pass that watershed you see there before it's too late. It's an infernally bad one, I can see. Not even a dinghy will cross it for an hour each side of low water."

"Well, how far is the watershed?"

"Good Lord! What are we talking for? Change, man, change! Talk while we're changing." (He began flinging off his shore clothes, and I did the same.) "It's at least five miles to the end of it; six, allowing for bends; hour and a half hard pulling; two, allowing for checks. Are you fit? You'll have to pull the most. Then there are six or seven more miles — easier ones. And then — What are we to do when we get there?"

"Leave that to me," I said. "You get me there."

Taming the jigsaw

Use an upside-down blade to cut without tears

by Richard Toyne

For anyone fitting out a boat's interior, the jigsaw is a very versatile tool. Unless you are familiar with a few simple techniques, however, it has some drawbacks that might appear to limit its usefulness.

One of these, which often becomes evident when you cut plywood, is the way in which the blade tends to tear and splinter the top surface. This is of special concern if the cut will be visible and if the plywood is faced with an expensive veneer. The splintering occurs because the teeth on a conventional jigsaw blade point upward and therefore cut on the upstroke.

A well-known trick to combat this, and one that is quite effective on melamine-faced lumber, is to put masking tape along the line of the cut. Other methods include using a blade with finer teeth, setting the saw to a low speed, and cutting very slowly. These are only partial solutions; the top veneer will always suffer a certain amount of damage. To compensate, you have to cut the panel a little oversize and clean up the edges with a plane or spokeshave.

Cut on the downstroke

One way to eliminate this problem completely is to use an upside-down jigsaw blade. The teeth on such a blade point downward and cut on the downstroke. When cut with an upside-down blade, the top surface will remain completely undamaged, although there will still be some splintering on the underside.

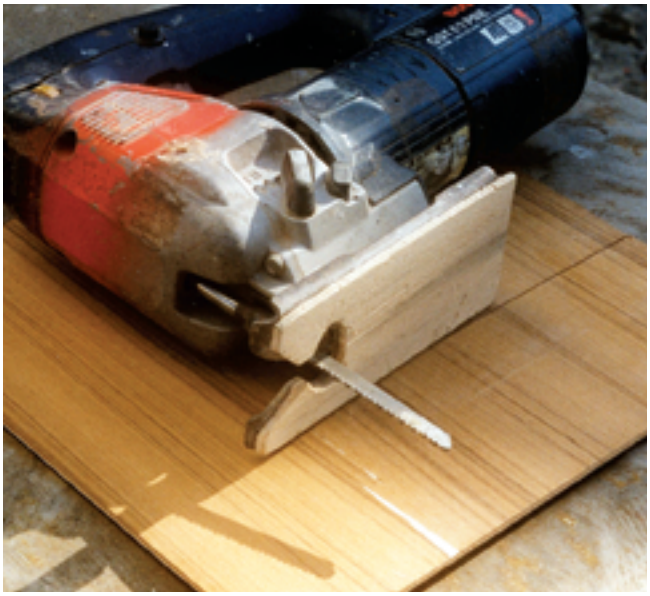
I have found that the only difficulty with these blades arises if the lumber I am cutting is very thick. Because a conventional blade cuts on the upstroke it actually pulls itself into the wood as it cuts. All the operator has to do is guide the saw. With an upside-down blade, which cuts on the downstroke, the blade is trying to push the saw and work apart. Unless you lean very heavily on the saw, it will sometimes bounce if the blade meets a little extra resistance while cutting thick wood.

As well as the upside-down blades, other blades are available to help the woodworker produce high-quality results from a jigsaw. Very narrow blades are made for cutting tight curves and, conversely, extra-wide ones are made for straight cuts. Blades also come with teeth of different sizes. Large teeth provide a fast cut, while the smaller ones create a finer, cleaner saw kerf. It's also possible to find metal-cutting blades, which I have used in a small saw to cut steel up to 3/16-inch thick, although the rate of cut was very slow.

One other shortcoming of the jigsaw, which can be especially significant for anyone carrying out fine work, is the way in which it can bruise or mark the surface of the lumber as you work. A solution is to fit the saw with a shoe. You can make one from a small scrap of thin plywood cut to shape and then glued to the foot of the saw. By using a shoe, you can cut even previously painted or varnished surfaces without fear of damage.

The damage to the teak veneer on the right-hand saw cut was caused by a conventional jigsaw blade cutting on the upstroke. The left-hand saw cut was made with an upside-down blade. In this case, the veneer was left intact.

Richard Toyne and his partner, Magali Bellenger, left England in 1998 on their 32-foot gaff cutter, Joass, *and sailed to the Mediterranean via Gibraltar. In 2000, they sold* Joass *and bought* Sigfrid, *a 34-foot steel ketch, and have been exploring the Western Mediterranean in her ever since.*



A shoe, made from a scrap of wood and glued with contact adhesive to the saw's foot, will prevent surface damage and scratching. This is particularly useful when cutting lumber that is already painted or varnished.

Chamois drip cloth

An automatic bailer for deck puddles

by Karen Larson

This is not an original idea. We copied it from fellow sailor and *Good Old Boat* publisher Michael Facius. After all, we figured, if it works for Michael and Patty on their C&C 30, shouldn't it also work on our C&C 30 and many other sailboats with similar toerails? After three seasons with excellent results, we are able to give the chamois drip cloth idea two satisfied thumbs up.

On any boat with a toerail that stands somewhat proud of the deck, standing water will form a puddle at the lowest point on the deck. This puddle will be as deep as the bottom of the lowest hole in the toerail unless a drain is there specifically to remove it. This is not rocket science. But it is annoying nonetheless. The C&C 30's toerail has perforations from bow to stern. Although miraculously handy for attaching docklines and headsail-sheet leads, they do trap a puddle near the lifeline gate, where the sheerline dips to its lowest point. If these boats have been anchoring, as ours does frequently, make that a puddle of *muddy* water. This puddle evaporates slowly and leaves behind caked mud, rust rings, mildew, and perhaps even moss in some climates.

Maybe he didn't invent this idea either, but we noticed that when Michael left his boat unattended, he installed a square of chamois through one of the toerail perforations at the low spot on each side of his boat. With the help of a faux chamois, available from the auto section of the local big-box store, the puddle magically drains away.

Now, whenever we leave *Mystic* at the dock for any length of time, we do likewise. The chamois cloths last about a season before they're so battered and worn that we have to replace them. Since we can cut several squares from the material contained in one package, we consider it to be a very inexpensive way to remove the rainwater that would otherwise stand on the deck in our absence.

Karen Larson and her husband, Jerry Powlas, founded Good Old Boat *magazine in 1998. They sail a C&C 30 named* Mystic *on Lake Superior.*

A square of faux chamois tucked through a toerail perforation wicks away the annoying puddle of water that tends to linger at the low point in the deck, leaving muddy reminders of anchorages past as it evaporates.

Boats

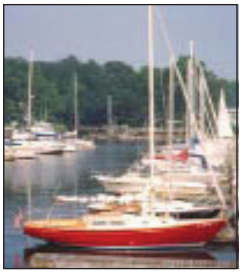
Tartan 27
1975. Venerable Sparkman & Stephens design. Sail-away cond. We've purchased a larger vessel. Well-loved and maintained w/ numerous recent upgrades. Since '01: new North Sails main, RF, lifelines, gas tank, centerboard cable, ports, running and standing rigging, and more. Cruised extensively around Cape Cod. $10,500.
Sue Haley
withal@comcast.net
508-255-6429

Southern Cross 28
1981. Factory finished. Universal diesel and Hurth transmission completely rebuilt '05. New steel cradle '08. H/C pressurized water. New Signet digital S/D, Garmin GPS, stereo. New alcohol stove. Main, jib, and staysail replaced '98. Hull below waterline completely refinished, 4 coats Pettit 2-part '03. New teak rubrail '03. Sailed on Lake Champlain, VT. $21,000.
Robert Miille
rmiille@yahoo.com
802-748-5663

Captiva 27
1987. Sloop-rigged, two owners. Excellent sailing boat in good cond. 18-hp Yanmar inboard diesel, tandem-axle trailer, 3'7" draft, 6 opening ports, 6'2" headroom, 155 genoa headsail new '02. Bought larger boat, motivated to sell. Pengilly, MN. $16,500.
Gary Miller
smiller7616@yahoo.com
218-247-7842

Bristol 30
1974. Atomic 4 engine, electronic ignition, electric fuel pump, FWC (not installed). GPS, compass, depth. Origo 2-burner alcohol and Force 10 2-burner propane stovetops, 2 freshwater tanks (bow and keel), new fuel tank (25 gal). S/S prop shaft, S/S 3-bladed prop. RF, 130 genoa, main (both in good cond.). In water, winterized, at mooring in Brooklyn, NY. Mooring included in price. $5,500.
Massimo Dell'Aria
mdellaria@aol.com
347-200-0500

Douglas 32
1974. Drastically rebuilt/upgraded since '03, including new engine in '06, fuel tank, holding tank, HW tank, refrigeration, AP, cushions, charger, Dinghy-Tow, 110V panel/wiring. Classic Ted Brewer design. Single owner. Sails beautifully, excellent in heavy weather. Freshwater use only but a capable offshore yacht. Extremely well built, above average teakwork below. Main and genoa RF, storm jib. Toronto. $34,900 CDN. Details: www.odcanada.org/zephyrrefit.pdf Photos: www.odcanada.org/zephyrslideshow.pdf
Jeff Solway
jeff.solway@rogers.com
647-271-4562



Tripp Lentsch 29
1963. Hull #7. Rare Tripp-designed classic (see article Nov. '06). Built in fiberglass by DeVries Lentsch. Well maintained and upgraded. Awlgrip red hull. Awlgrip/polyurethane deck. 4 berths. D/S, radar, Autohelm, new VHF. ST winches, RF jib. All sails, including drifter and spinnaker w/pole. Holding tank, Atomic 4. Very able and attractive cruiser. CT. $20,500.
Ed Holahan
203-367-3598

Grampian 30
1974 Canadian "cult" boat. Modified bow pulpit w/anchor roller. Modified stern rail w/swim platform and ladder. Dodger, Atomic 4, new upholstery in '97. Many upgrades. 6 sails, 3 batteries w/ charger. Needs someone to continue her restoration. Ready for the water in a couple of hours. VT. $8,000.
Ronald Morris
morrisr@together.net
802-477-2689

Pearson 30
1971. Turnkey. Harken RF and traveler, 2-speed winches, new Raymarine D/S, Autohelm, new VHF, new batteries, and new lifelines. 2006 survey. Dry glass w/good sails and rigging. Interior updated and clean. Dodger. Good-running Palmer w/new carb and good compression. Freshwater boat in Northport, MI. Priced to sell at $10,500. Photos available.
Clifford Hale
cliffshale@comcast.net
517-230-2357

Hunter 28.5
1987. See *Good Old Boat* article July 2007. Recent de-rig and rebed all fittings. CD/XM stereo, Autohelm, Garmin 400 GPS. '04 dodger, Bimini, and canvas. Recent cockpit cushions, Yanmar 2GM w/1100 hrs. New head, New Found Metals ports. Nice sails, 150 genoa. The cleanest one anywhere. Middle River, MD. $18,500.
Brad Bock
bbtvr@yahoo.com
717-805-3175

Vancouver 25
1983. Taiwan-built pocket world cruiser w/beautiful lines. In good functional cond. 7,400 lb, full keel, Yanmar 2GM, Bruce and CQR anchors on twin bow roller, tiller, good sails, Profurl, full standing headroom in cabin, enclosed head, pressure water, cabin heater, comfortable double berth plus 2 singles, 6 opening bronze ports, Autohelm, boom gallows. Recent standing riggin; Set up for singlehanding. Deale, MD. $18,000.
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Contessa 26
1973 sloop (J.J. Taylor). A handsome good old boat in good cond. A few dings on the hull paint. Near-new Doyle sails (main/furling jib) lightly used. Dutchman system, drifter Autohelm 3000, Datamarine instruments with new transducer. Cabin newly painted, clean, dry cozy, near new cushions and foam, new head '03, new water tank '06. Lying North Channel, Blind River, ON. $9,500 CDN.
Donald Chambers
captnemo@ku.edu
785-843-5805

Allied Seabreeze 35
1967 yawl, many recent upgrades Westerbeke 30-B3, AC/heat, fridg propane stove/oven, dinette configuration w/birch interior, ST winches, North main and mizzen '02, Sobstad 130 jib '00, 150 jib, storm jib, bronze CB, Monel fuel tank, upgraded electrical and wa ter systems, 4 AGM batteries, 90 gal water, Muir anchor windlass, CQR anchor-100' chain, Bimini, great sailing boat ready to cruise. In Forked River, NJ. $34,900.
Tom & Vicki Thompson
vickitom@optonline.net
732-751-0535

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John Nordstrom
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713-775-3250

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R. Todd Smith
todd@oceancorps.com
617-429-4852

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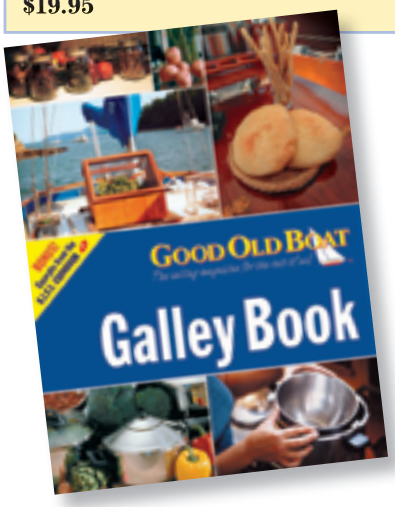

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As part of our website redesign in early 2008 (you have been to <http://www.goodoldboat.com> to look around, haven't you?) we added a couple of special gee-whiz computer extras for those who like to do things online.

- If you have wondered about your **subscription status** (usually right after you've thrown away that label sheet that came with the last issue), you can now check the status of your subscription anytime you'd like at <http://www.goodoldboat.com/subscription_services/subscription_status.php>.

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- **Just for kids** (and parents and grandparents) we included three John Vigor books: *Danger, Dolphins, and Ginger Beer*, along with *Sally Steals an Elephant,* and *So Long, Foxtrot Charlie*.

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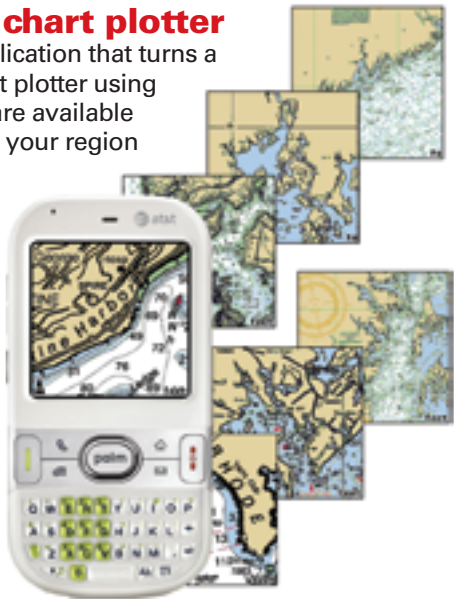


ActiveCaptain has designed an application that turns a graphics-enabled phone into a chart plotter using NOAA charts. Thousands of charts are available across14 NOAA regions. Download your region for $19.95 or all 14 regions for $49.95. The ActiveCaptain website is very robust with instructions, guidelines, and information about how to use your cell phone as a navigational tool. If your phone is capable of receiving a GPS signal or is Bluetooth capable, adding a GPS can turn it into a location-tracking chart plotter. The software is available for Windows Mobile and Palm systems. The website has a free "On the Water" section, an Internet-accessed cruising guide with thousands of marinas, areas of local interest, and anchorages. With a browser on your phone, you can access this cruising information as you travel.

Visit the ActiveCaptain website at <http://www.activecaptain.com>. For further product information, call 207-326-9100 or email support@activecaptain.com.

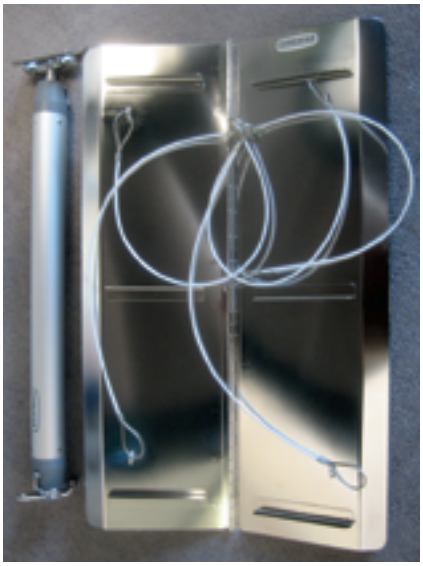
Old stainless like sparkling new

If you have a stainless-steel grill, you'd probably like it to look shiny and new. Here's how: Magma Products has just introduced Magma Magic, a stainless-steel grill restorer that promises to bring back that polished stainless shine. "We've tested dozens of grill restorers over the years. Never, until now, have we found one we'd put our name on," says Magma founder and CEO, Jim Mashburn. "This product really is magic. It's also safe for the environment, which is important to us at Magma." Magma Magic Stainless-Steel Grill Restorer works on any stainless-steel grill or surface at home or onboard and comes in 16-ounce bottles.

The product has a suggested retail price of $16.98 and is available in marine stores. For more information, visit <http://www.magmaproducts.com>, call 562-627-0500, or email mail@magma products.com.

Stop rocking and rolling

When you and your crew are stuck in an anchorage with a swell on the beam, the side-to-side rocking and rolling can drive you crazy. Forespar has just introduced a kit designed to dampen this unpleasant motion: Roll-X Flopper Stopper Pole Kit. It consists of a sturdy flopper stopper rig made of anodized aluminum with stainless-steel fittings. The device can be put in service or stowed away quickly with the help of quick-release pole fittings. The rig lowers the stabilizer to 6 feet below the water's surface and extends it well off the beam. Once deployed, the stabilizer greatly retards the boat's rocking motion by using water resistance to slow the up-and-down movement of the submerged stabilizer.



Similar devices have been used in the world's cruising grounds for decades, but Roll-X offers one refinement: an anti-skate baffle to prevent the stabilizer from skating sideways under water.

Expect to see this new product on the Forespar website this spring. The cost for a boat up to 40 feet is approximately $1,500. Look for it at <http://www.forespar.com>, call 949-858-8820, or email sales@forespar.com.

To be featured on this page, items must be new products. If you would like to have your product featured here, please send an email to Michael Facius, michael@goodoldboat.com, or call him at 612-605-8319. By the way, readers, if you contact a marine supplier mentioned here or elsewhere in our magazine, please remember to tell the folks there that *Good Old Boat* sent you.

Time afloat is quality time

A racing cruiser finds bliss in sailing alone

by Andy Vine

I AM SITTING IN THE CABIN OF MY SLOOP, *Gwyneth*, a 1974 Crown 28. We're peacefully at anchor in Telegraph Harbour on Thetis Island after a day of good sailing in the wonderful southern Gulf Islands of British Columbia. On the stereo is some glorious Bach from an album entitled *Musical Evenings with the Captain* — Captain Jack Aubrey that is, the unforgettable creation of the late Patrick O'Brian. In my glass, some excellent British Columbian merlot. The lines are all tidy, the dishes are washed, and all is well with my world.

I left my home port of Vancouver yesterday and have gradually been de-pressurizing. That's what boats are for, isn't it? Today I started out from Silva Bay on Gabriola Island, negotiated the sometimes tricky Gabriola Passage, and motored south in the early morning calm. Gradually a wind came up from astern, and I changed my headsail from the working jib to a 160-percent genoa. This I flew wing-and-wing, using the spinnaker pole in lieu of a whisker pole. On the stereo I had some lovely samba, surely the quintessential music of existential contentment . . . so sweet and laid-back. But after a while, even this became too "manufactured" so I turned it off, let the tiller pilot steer the boat, and took out my favorite bamboo flute . . . playing my heart's joys and woes to the gulls and the seals.

Ravioli for supper

As I write this, I have a pot of water heating on the stove to cook the ravioli I will have for supper. I reflect on how taking these few days on my own was not easy. The demands of home and work were strong but, as the poet, John Masefield, wrote, "the call of the running tide" was stronger. Solo time on my boat is a precious commodity. Only when alone do I find the inner space to think and feel in the moment, to follow my bliss . . .

Like I did earlier today when, after running south for a couple of hours, I saw two boats sailing close-hauled in the opposite direction. They were heeling nicely to the wind and I thought: "That looks like fun." Handing the spinnaker pole, I changed course, hardened in the sheets, and gave chase. Ah yes, the old competitive spirit is still alive and well. With my 30-year-old genoa and brand-new mainsail, I brought her on the wind and began a tacking duel in the mile-wide channel through which I had just come. On the third tack, I passed one boat and, two tacks later, left the other in my wake. As I engaged in this silly contest, in which I suspect neither of the other skippers had the slightest interest, I reflected on how the real joy was in simply sailing my boat to the best of her ability. Watching the telltales, catching the shifts and lifts, tacking smartly; these were the elements that gave me such intense pleasure. Winning the "race" was just gravy.

Overnight stop

Once finding myself "in the lead," I chose to keep on going north and make this wonderful harbor my overnight stop. Fully protected, it offers a safe anchorage plus two marinas, one with a nice pub/restaurant. On arriving, I found a spot to drop my hook, launched the dinghy, and went ashore for a pint.

Mmm . . . the pasta is good. Now the music is a little more pensive, which is OK. This is my pensive time. A time to reconnect with the being who is beyond names and descriptions, the one who is simply awake and alive in the here and now. This elusive "inner me" only surfaces when the outer world is really calm. Like today, when we were running wing-and-wing at 3 knots, and I felt like playing my flute instead of listening to canned music, however wonderful it was. It's in moments like these when the pure joy of being takes over and far excels any of the "pleasures" civilized life offers us. That's why I love sailing. It's pure and elemental, especially when you turn off the "iron topsail."

So here I sit in *Gwyneth's* cozy cabin surrounded by the books, CDs, and other stuff that has found its way onto her shelves. It's a comfortable and comforting environment. Outside, I hear revelers noisily returning from the pub. I feel no envy and wish them well. Tonight I will sleep peacefully, satisfied with a day well lived.

Learn more about Canadian songwriter and folk balladeer Andy Vine by visiting <http://www.andyvine.com>.

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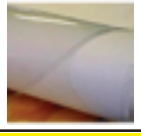

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